

ARCHEOLOGICAL INVESTIGATIONS AT
DUNGENESS HISTORIC DISTRICT
CUMBERLAND ISLAND NATIONAL SEASHORE

By

Robert Hellmann

SEAC Accession Number 1902

2007

Management Summary

From May 3–21, 2004, personnel from the National Park Service, Southeast Archeological Center in Tallahassee, Florida conducted a survey of portions of the Dungeness Historic District at Cumberland Island National Seashore (CUIS). The Dungeness Historic District is located at the south end of Cumberland Island and includes at least twenty-nine historic structures associated with the Carnegie-era (ca. 1880 to the early twentieth century) currently listed in the Archeological Sites Management Information System (ASMIS) database as the Dungeness Complex (CUIS-50.00). In May 2003, a ground-penetrating radar survey was conducted at the Dungeness Historic District to identify prehistoric and historic architectural and archeological features in the upper garden of the Dungeness Mansion ruins (CUIS-50.01). Features associated with the Carnegie-era were identified but evidence of earlier occupations was not recognized. It was suggested that more traditional archeological survey methods might identify deeper lying features or cultural deposits in the upper garden area as well as in heavier forested locations.

In 2004, three areas of the Dungeness Historic District were selected for subsurface testing and given field site numbers 1902.01 (Dungeness upper garden), 1902.02 (Main Road), and 1902.03 (Duck Pond). The Dungeness upper garden was investigated to ascertain the nature of the fill used to terrace it, and to identify any possible remnants of earlier occupations. In addition, the Main Road and Duck Pond locations were selected for survey when an examination of historic maps (ca. 1802 and 1827) indicated that historic structures believed to have been slave cabins once stood in these areas.

In the Dungeness upper garden (1902.01) three 1 x 2 meter excavation units were opened on the upper garden lawn and revealed the presence of what appears to be the remains of prehistoric shell midden at a depth of about 20 to 50 centimeters below the surface. Further shovel testing across

the lawn indicates the zone of intact midden is present across the upper garden area. Diagnostic pottery recovered from the midden deposits indicate prehistoric occupations beginning sometime during the Archaic period (2200 B.C.) through the Mississippian period (1500 A.D.). Although extensively disturbed by activities in the historic period, the evidence indicates that at least some areas of relatively intact shell midden are present and should be taken into consideration if any ground disturbing activities are to take place in the Upper Garden area.

On the Main Road (1902.02) north of the mansion ruins, shovel testing was conducted in the vicinity of small scatters of brick and mortar that are the remnants of early nineteenth century structures. Shovel testing revealed a broad scatter of artifacts attributed to the early nineteenth century, and a historic midden containing oyster shell and historic debris. Three excavation units were opened near the midden and brick scatters which further revealed a dense concentration of artifacts related to what are believed to have been slave cabins associated with the Greene-Miller Dungeness plantation. It is recommended that more extensive excavations be undertaken to identify architectural details of the cabins and to obtain a more representative sample of artifacts which would enable a more accurate interpretation of the site for the public.

Testing was also conducted in the Duck Pond survey area (1902.03) to identify any possible remains of structures illustrated on the McKinnon map of 1802, which are believed to have been slave cabins associated with the earliest period of the Greene-Miller plantation. During the Carnegie era, a large cottage had been built on the site along with gardens, and the Duck Pond. Shovel testing across the 1902.03 survey area revealed a large debris field of artifacts related to the demolished late 1880s cottage, but also some evidence of an early nineteenth century occupation, as well as a large number of prehistoric ceramics. Although

shovel testing was extensive across the survey area, large sections were not tested due to standing structures, remains of the cottage garden and other obstructions. Therefore, it is believed that, although some architectural features associated with the earlier plantation period may have been destroyed by the construction and demolition of

the later cottage, some others may still be present. Currently there are no apparent threats to these resources, however, more systematic archeological survey is recommended to better delimit site boundaries and artifact distributions beyond the limits of the current survey.



Contents

MANAGEMENT SUMMARY	2
FIGURES	5
TABLES	6
ACKNOWLEDGEMENTS	7
CHAPTERS	
1. INTRODUCTION	8
2. ENVIRONMENTAL SETTING	9
3. PREHISTORIC AND HISTORICAL OVERVIEW	12
THE PALEOINDIAN PERIOD	12
THE ARCHAIC PERIOD	12
THE WOODLAND PERIOD	14
THE MISSISSIPPIAN PERIOD	15
THE HISTORIC PERIOD	17
4. THE DUNGENESS HISTORIC DISTRICT	24
5. PREVIOUS ARCHEOLOGICAL WORK	29
EHRENHARD'S 1975 SURVEY OF CUMBERLAND ISLAND (SEAC Acc. 188, CUIS Acc. 253)	29
EHRENHARD'S 1981 ARCHEOLOGICAL INVESTIGATION AT DUNGENESS SOUTH AND DUNGENESS WHARF (SEAC Acc. 599, CUIS Acc. 359)	29
HORVATH'S 1995 INVESTIGATION FOR DUNGENESS SEPTIC SYSTEM (SEAC Acc. 1187, CUIS Acc. 459)	30
NICKEL'S 2003 GROUND-PENETRATING RADAR SURVEY AT THE DUNGENESS COMPLEX (SEAC Acc. 1846, CUIS Acc. UNASSIGNED)	30
6. RASP 2004 INVESTIGATION METHODS AND RESULTS	32
DUNGENESS UPPER GARDEN (1902.01)	32
<i>Excavation Unit 1 (480–482E, 462–463N)</i>	32
<i>Excavation Unit 2 (468–470E, 480–481N)</i>	35
<i>Excavation Unit 3 (459–460E, 490–492N)</i>	38
<i>Shovel Testing</i>	45
<i>Interpretation</i>	45
MAIN ROAD (1902.02)	50
<i>Excavation Units 1 (517–518E, 501–502N) and 3 (518–519E, 501–502N)</i>	57
<i>Excavation Unit 2 (525–526E, 479–480N)</i>	58
<i>Artifact Analysis and Interpretation</i>	67
<i>Summary of Results</i>	69
DUCK POND (1902.03)	70
<i>Architectural Remains</i>	70
<i>Kitchen-Related Items</i>	70
<i>Clothing</i>	79
<i>Miscellaneous Activities</i>	79
<i>Prehistoric Ceramics</i>	79
7. SUMMARY AND RECOMMENDATIONS	81
APPENDICES	
1. COLLECTIONS FROM DUNGENESS UPPER GARDEN (1902.01)	82
2. COLLECTIONS FROM THE MAIN ROAD (1902.02)	91
3. COLLECTIONS FROM THE DUCK POND (1902.03)	101
REFERENCES	109

Figures

1. Location of Dungeness, Cumberland Island, and Camden County, Georgia	9
2. Ruins of the Greene-Miller Dungeness mansion as they looked ca. 1880	22
3. Boundaries of the Dungeness Historic District.....	25
4. Section of the 1802 McKinnon map of Cumberland Island illustrating possible slave structures north of Garden Point.....	26
5. Section of the 1827 Perrault map showing the Dungeness mansion at the end of the Main Road and possible slave cabins to the north.....	27
6. Dungeness upper garden area surveyed by Nickel (SEAC Acc. 1846).....	31
7. Dungeness survey locations (SEAC Acc. 1902).....	33
8. Dungeness upper garden (1902.01) shovel tests and excavation units	34
9. Excavation Unit 1 in Dungeness upper garden (1902.01)	35
10. Excavation Unit 2 in Dungeness upper garden (1902.01)	38
11. Excavation Unit 3 in Dungeness upper garden (1902.01)	44
12. Main Road (1902.02) shovel tests and excavation units.....	53
13. Excavation Unit 1 and Feature 2.....	58
14. Excavation Unit 2 and Feature 1 at the base of Level 4	64
15. Duck Pond survey area (1902.03) and shovel test locations	71

Tables

1. Early Culture Sequence for the Southeastern U.S.	13
2. Dungeness Upper Garden Excavation Unit 1 Levels and Associated Artifacts.....	36
3. Prehistoric Ceramics Recovered from Excavation Unit 1, Dungeness Upper Garden.....	37
4. Dungeness Upper Garden Excavation Unit 2 Levels and Associated Artifacts.....	39
5. Prehistoric Ceramics Recovered from Excavation Unit 2, Dungeness Upper Garden.....	42
6. Dungeness Upper Garden Excavation Unit 3 Levels and Associated Artifacts.....	43
7. Prehistoric Ceramics Recovered from Excavation Unit 3, Dungeness Upper Garden.....	45
8. Dungeness Upper Garden Shovel Tests and Associated Artifacts	46
9. Distribution of Historic and Prehistoric Ceramics by Level Within EU1, EU2, and EU3, Dungeness Upper Garden	51
10. Main Road Shovel Tests and Associated Artifacts.....	54
11. Main Road EU 1 Levels and Associated Artifacts	59
12. Main Road EU 3 Levels and Associated Artifacts.....	62
13. Main Road EU 2 Levels and Associated Artifacts.....	65
14. Duck Pond Shovel Tests and Associated Artifacts.....	72

Acknowledgements

I would like to say thank you to all those who assisted in the completion of the Dungeness survey. The field crew consisted of Meredith Hardy, John Detring, Ashley Melton, Erin Westfall, and Sonia Amos from the Southeast Archeological Center. They provided assistance not only in the field but in the lab as well. In the field we were also helped by volunteers Bernie Huber, a Cumberland Island VIP, and Ross Dillon, who traveled from California to help on the project. Dr. Guy Prentice, manager of RASP, provided guidance in the field and in the preparation of the final report. At SEAC, thanks

also go to the collections staff—Audrey Trauner, Bridget Beers, Richard Vernon, Charlie Sproul, and Hank Kratt—for their help during the project, and to Elizabeth-Lee Tarkington for the formatting and printing of the final report. I also appreciate the support of Mr. John Ehrenhard, the Director of the Center, and Dr. George Smith, Associate Director for Investigations and Evaluations. Finally, I would also like to thank John Fry, Resource Manager, and all the personnel from Cumberland Island National Seashore who provided assistance during the project.



Chapter 1

Introduction

From May 3–21, 2004, personnel from the National Park Service, Southeast Archeological Center in Tallahassee, Florida conducted a survey of portions of the Dungeness Historic District at Cumberland Island National Seashore (CUIIS) in southeast Georgia as a Regionwide Archeological Survey Program (RASP) survey project. The survey was conducted in conjunction with a previous Ground Penetrating Radar (GPR) survey undertaken in May 2003 which identified historical features in the upper garden located behind the ruins of the Carnegie-era Dungeness mansion (SEAC Acc. 1846). In addition to occupation by the Carnegie family in the late nineteenth and early twentieth century, the Dungeness Historic District also contains historic sites extending as far back as the Spanish mission period, as well as prehistoric shell middens. Features associated with earlier historic and prehistoric periods were not identified during the GPR survey and it was suggested that such

features possibly existed at a greater depth below what was believed to be fill brought in to terrace the upper garden area. It was also suggested that archeological survey techniques would offer the greatest potential to identify earlier sites in the heavily forested areas which inhibited the use of GPR techniques (Nickel 2003:20). In addition to the Dungeness upper garden, two other areas were selected for survey based on historic maps which indicated where structures had stood in the early nineteenth century. This archeological survey supports NPS goals set forth in 36 CFR 800, sections 106 and 110 of the National Historic Preservation Act (NHPA), the National Environmental Protection Act (NEPA), Executive Order 11593, the Archeological Resources Protection Act (ARPA), the Government Performance and Results Act (GPRA), and Systemwide Archeological Inventory Program (SAIP).



Chapter 2

Environmental Setting

Cumberland Island, approximately 17.5 miles long and varying between .5 and 3 miles wide, is located off the coast of southeast Georgia near the town of St. Marys in Camden County, Georgia (Figure 1). The authorized boundaries of Cumberland Island National Seashore (CUIS) include Big and Little Cumberland Islands and surrounding salt marshes encompassing an area of almost 37,000 acres. Cumberland Island is located within the Coastal Plain physiographic province that extends inland from the coast to the Fall Line, the geological boundary which separates the Coastal Plain from the Piedmont. The Coastal Plain is characterized by a transition of gently rolling hills into low-lying pine-forests, saltwater marshes and estuaries on the coast, and bisected by rivers which empty into the Atlantic Ocean. The Satilla River empties into St. Andrews Sound at the north end of Cumberland Island, and the St. Marys River, which forms the border between southeast Georgia and northeast Florida, empties into Cumberland Sound.

Cumberland Island is comprised of Pleistocene age deposits of the Silver Bluff formation, and more recent Holocene age deposits. The Silver Bluff formation is one of six Pleistocene age barrier-island coastlines which run

parallel to the Atlantic coast from South Carolina to North Florida that were formed as sea levels receded with the expansion of glaciers (Hails and Hoyt 1969:54). The Silver Bluff formation, which is about 1.4 meters above mean sea level (amsl),

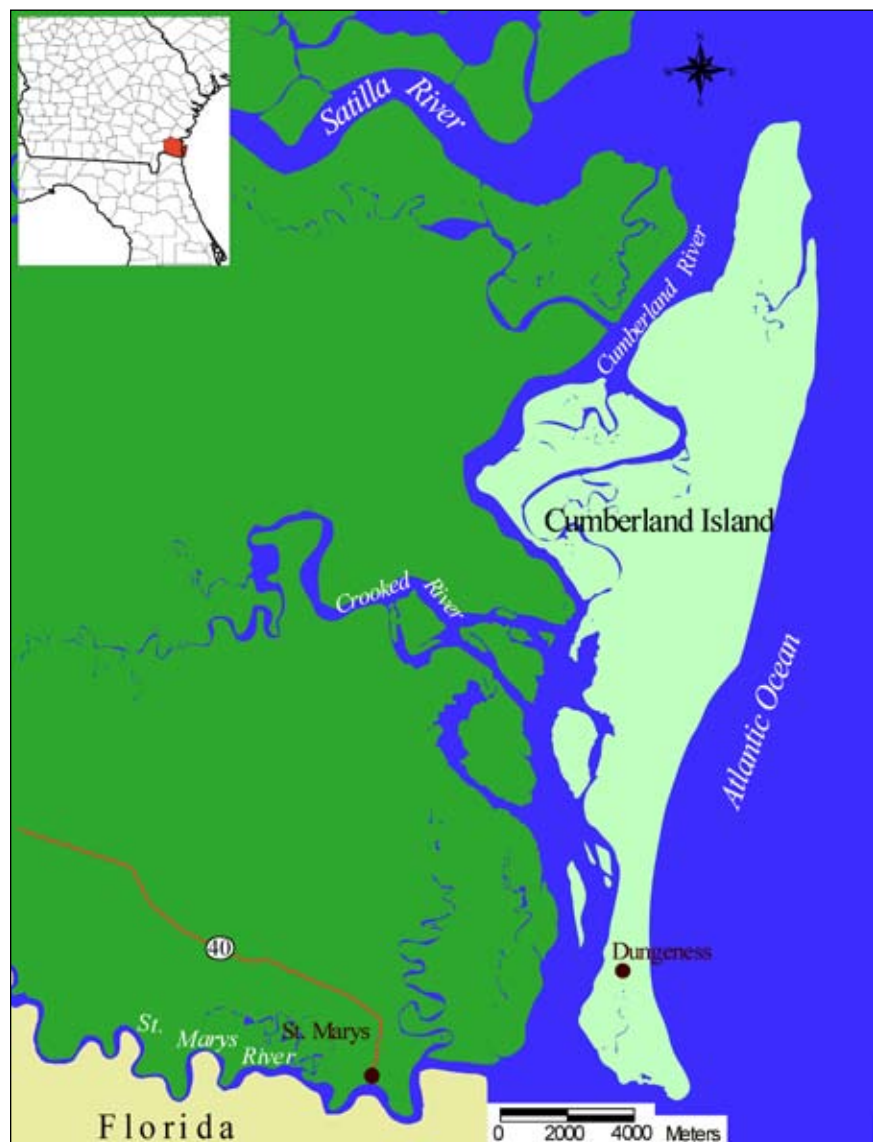


Figure 1. Location of Dungeness, Cumberland Island, and Camden County, Georgia (inset).

is estimated to be between 25,000 and 36,000 years old (Hails and Hoyt 1969:64). The onset of the Holocene Epoch, approximately 11,650 years ago (9650 B.C.) (Alley et al. 1993), was marked by another period of glacial retreat corresponding with a rise in sea level with the eventual formation of the present day coast line. By 1500 B.C., when the sea level transgression began to slow, the Holocene barrier island formations such as Little Cumberland Island and the Atlantic beach front of Big Cumberland were abutting the Pleistocene formations (Hillestad et al. 1975:26).

Beneath the Pleistocene and Holocene formations are older deposits of Pliocene and Miocene age clay, sand and gravel which form a shallow-water aquifer that is recharged by local rainfall (Hillestad et al. 1975:45). This aquifer is separated from a deeper aquifer by a layer of older Miocene clays that form a barrier, or aquiclude, over formations of porous Eocene and Miocene limestone. These formations form an artesian aquifer known as the Coastal Plain aquifer. This aquifer lies approximately 500 feet beneath Cumberland Island, and is recharged by rainfall in the Valdosta area where the limestone nears the surface (Hillestad et al. 1975:45). The natural flow of the artesian aquifer has provided water supplies to Dungeness since the late nineteenth century when a well was dug by the Carnegies (Hillestad et al. 1975:47). The shallow water aquifer also provides water supplies to the rest of Cumberland Island, but the lack of artesian pressure requires water to be pumped from wells between 65 and 265 feet deep (Hillestad et al. 1975:49).

Principal soil types identified in the Dungeness Historic District are Cainhoy and Mandarin fine sands in the vicinity of the Carnegie mansion ruins. To the east, past Beach Field, soils transition to Fripp-Duckston and Beach soils associated with sand dunes and swails and the adjacent beach (Rigdon and Green 1980:15–18). Beach soil, which is distinguished from the dune line by their twice daily inundation by tide waters, is comprised of fine to coarse sand, and varying amounts of small shell fragments. Moving to the west away from the beach, Fripp-Duckston soils are encountered in the dunes and are formed from thick sandy sediments

which occur on 0 to 20 percent slopes among sand dunes and interdune areas adjacent to the beach. The Fripp soils make up the structure of the sand dune itself and are comprised of grayish-brown (10YR 5/2) fine sand which grades into white (10YR 8/2) fine sand. The soil pH is slightly acid throughout the varying levels. The Duckston soils are grayish-brown (10YR 5/2) sand at the surface and grade into greenish gray (5GY 6/1) sand from a depth of 55 to 80 inches. These soils occur in the depressions and flats between the dunes and next to marshes and are frequently flooded. The soil pH is medium acid at the surface and mildly alkaline in the lowest level (Rigdon and Green 1980:39–40). Cainhoy fine sand is formed from sandy marine sediments located on nearly level to gently sloping ridges with 0 to 5 percent slopes. The soil tends to be dark gray (10YR 4/1) fine sand at the surface which grades to a brownish-yellow (10YR 6/6) fine sand to a depth of approximately 18 inches. Beneath this there are layers of very pale brown (10YR 7/4) sand to 50 inches, light gray (2.5Y 7/2) to white (10YR 8/2) sand to a depth of approximately 100 inches, and finally by a layer of black (5YR 2/1) to dark reddish-brown (5YR 2/2) sand to about 120 inches. The soil pH is very strongly acid to slightly acid, has a rapid permeability, and is excessively drained (Rigdon and Green 1980:38–39).

Mandarin fine sand, found in the Garden Point area of Dungeness is formed from thick sandy marine sediments, and occurs on somewhat poorly drained, nearly level soil on slight ridges and broad flats. The soil is very dark gray (10YR 3/1) fine sand at the surface to light gray (10YR 7/2) fine sand to a depth of approximately 19 inches. Below these layers, there is a weakly cemented organic hardpan extending to a depth of approximately 34 inches and grades from black (10YR 2/1) in the upper level to dark brown (10YR 3/3) fine sand in the lower level. Beneath the hardpan there is another layer of fine light gray (10YR 7/1), white (10YR 8/2), and grayish-brown (10YR 5/2) sand, and another layer of organic hardpan of weakly cemented black (10YR 2/1) fine sand. Mandarin fine sand has a soil pH that is extremely acid to medium acid at the surface, and medium acid to

neutral below the hardpan. Overall, the soil is very sandy and poorly drained (Rigdon and Green 1980:41).

Several distinct ecological zones are found within the Dungeness Historic District and include the beach and dune areas, swales, beach meadows, freshwater sloughs, maritime forests, and saltwater marshes, which are characterized by the presence of various plant communities. The dunes and swales are colonized by various plant species, such as sea oats, sandspur, saltmeadow cordgrass, and eventually larger shrubs and trees

hardy enough to withstand the sun and salty sea air (Kaplan 1988:20). Ultimately a maritime forest of live oak, southern magnolias, pines, and cabbage palms is established generally on the older, Pleistocene formations. Maritime forest areas destroyed by fire or cleared for agriculture are succeeded by stands of loblolly and slash pine that can withstand the harsh conditions of fire damaged fields and will eventually revert back to hardwood stands if the natural succession is allowed to take place (Schoettle 1996:41).



Chapter 3

Prehistoric and Historical Overview

THE PALEOINDIAN PERIOD

Exactly when humans first arrived in the New World is an ongoing discussion in American archeology. Until a few years ago, the most commonly accepted theory was that the first Americans migrated from Asia across the Bearing Strait land bridge during the last Ice Age approximately 12,000 years ago (i.e., 10,000 B.C.) and quickly spread throughout North and South America. But recent discoveries at archeological sites in North and South America found to date 12,500 and more years ago (Adovasio and Pedler 1997; Meltzer et al. 1997; Bonnicksen 1999; Dixon 1999) and the application of new calibration factors to adjust late Pleistocene and early Holocene radiocarbon dates (Stuiver et al. 1998) for past changes in atmospheric ^{14}C have now caused archeologists to reconsider the timing, the routes and the means by which the first Americans arrived and populated the two continents. Subsequently, archeologists today are seeing many of the commonly accepted dating conventions cited less than a decade ago for the earliest cultural periods in the eastern U.S. (Table 1) now being replaced with significantly older dates.

The first well-dated evidence of human occupation in the southeastern United States occurs around 11,500 B.C. with the appearance of the earliest documented Americans, who are now referred to as Paleoindians (Anderson 2001, n.d.). Artifacts and sites dating to this period are relatively rare compared to later periods, apparently because of the generally low population densities, reuse of lithic tools through time, and post-depositional processes that have buried or eroded away sites. This is particularly true on the coast and barrier islands that were subject to fluctuating sea levels which have inundated Paleoindian sites on the outer Continental Shelf. Where evidence exists

in other areas, it is most readily recognized in the form of distinctive projectile points such as Clovis (Early Paleoindian, ca. 11,500–10,900 B.C.) and later unfluted points such as Beaver Lake, Quad (Middle Paleoindian, ca. 10,900–10,000 B.C.) and Dalton (Late Paleoindian, ca. 10,000–9500 B.C.). The presence of these projectile point types are associated with Paleoindians who were fairly generalized hunter-gatherers subsisting, in part, on a wide range of animals including now extinct megafauna such as bison, mastodons, caribou, and mammoths. Changing climatic conditions at the close of the Pleistocene and the onset of the Holocene marked the end of the Paleoindian period. As the climate became warmer, the glaciers retreated in eastern North America, and sea levels rose. Deciduous forests spread northward and replaced the more cold tolerant jack pine and spruce forests which had supported the Pleistocene megafauna. By the beginning of the Early Holocene period (ca. 9650 B.C.) most of the megafauna and Paleoindian cultures had vanished and were replaced by the increasingly more populous and sedentary societies of the Archaic period.

THE ARCHAIC PERIOD

The Archaic Period in the Southeast is distinguished from the preceding Paleoindian period by a gradual transition from the mobile hunter-gatherer lifestyle to a more sedentary one which is associated with a rise in population, indicated by changes in technology and an increase in the number of sites throughout the Southeast. Technological change in the Early Archaic period is evident from the transition of fluted lanceolate projectile point forms to side and corner notched types such as Big Sandy/Taylor (ca. 9500–8500 B.C.) and Palmer/Kirk Corner Notched (ca. 8500–7800

Table 1. Early Culture Sequence for the Southeastern U.S.

Cultural Divisions	Conventional Dates** (B.C.)	Revised Dates (cal. B.C.)
<i>Early Paleoindian</i>	<i>9500-9000</i>	<i>11,500-10,900[†]</i>
Clovis	9500-9000	11,500-10,900* [†]
<i>Middle Paleoindian</i>	<i>9000-8500</i>	<i>10,900-10,000*[†]</i>
Cumberland	9000-8500	
Quad	9000-8500	10,900-10,000*
Beaver Lake	9000-8500	10,900-10,000*
<i>Late Paleoindian</i>	<i>8500-8000</i>	<i>10,000-9500[†]</i>
Dalton	8500-7900	10,000-9200*
Hardaway Side Notched	8000-7000	10,000-9200
<i>Early Archaic</i>	<i>8000-6000</i>	<i>9500-6900</i>
Big Sandy/Taylor	8000-7000	9500-8500* [†]
Kirk Corner Notched	7500-7000	8500-7800*
St. Albans	6900-6500	8000-6600 [†]
LeCroy	6500-5800	8000-6600 [†]
Kanawha	6500-5800	8000-6600 [†]
<i>Middle Archaic</i>	<i>6000-3000</i>	<i>6900-3600</i>
Kirk Stemmed/Serrated	6900-6000	6900-6300*
Eva/Morrow Mountain	5500-3500	6300-5400*
Sykes/White Springs	6000-3500	5400-4300*
Benton	3500-2000	4500-3600*
<i>Late Archaic</i>	<i>3600-1000</i>	<i>3600-1000</i>

** Conventional dates are derived from Anderson and Sassaman (1996) and Justice (1986).

* Revised dates are based on calibrated radiocarbon dates presented by Sherwood et al. (2004).

[†] Revised dates are based on calibrated radiocarbon dates presented by Anderson (2001, n.d.).

B.C.) types (Michie 1996; Sassaman 1996). Types such as Savannah River stemmed and Ledbetter Stemmed appeared near the close of the Middle Archaic and are present into the Late Archaic along with ground stone implements including atlatl (spearthrower) weights and axes which appear for the first time during this period as do a number of plant processing tools — nutting stones and manos. These, along with the occurrence of storage pits and large quantities of fire-crack rock at some sites suggests there was a greater degree of sedentism and reliance on plant foods compared to previous Early Archaic practices. While there is some evidence that some Archaic stage peoples cultivated crops such as cucurbits (squashes and gourds), sunflower, sumpweed, and goosefoot, it is believed that plant horticulture did not contrib-

ute a significant portion of the diet until well into Woodland times (Crites 1991; Smith 1989).

Ultimately these changes formed the basis for readily discernible regionalism in subsistence, resource utilization, and artifact manufacture. In coastal areas subsistence patterns were centered on the utilization of salt water marshes and tidal creeks as well as maritime forests. Archaic period sites on the coast are commonly identified as small circular shell middens, or more extensive mounded shell rings, or ridges (Russo 1992:111). In northeast Florida, radiocarbon samples and faunal analysis of pre-ceramic Late Archaic shell middens indicate that when the sites were formed between 3620 ± 80 and 2200 ± 60 B.C. its inhabitants occupied the area throughout the year (Russo 1992:110–111). By the Late Archaic

(ca. 3600–1000 B.C.) the first ceramics appear in archeological assemblages in the Southeast. The earliest types of ceramics identified within the Cumberland Island area are fiber-tempered St. Simons Plain or the more common Orange wares associated with northeast Florida. Generally, fiber-tempered Orange ceramics, related to the Orange period of northeast Florida (ca. 2300–1000 B.C.) are more common in archeological assemblages below the Altamaha River, while St. Simons period ceramics are more commonly associated with the central and north Georgia coast (ca. 2200–1100 B.C.) (Ward et al. 1986:10).

THE WOODLAND PERIOD

Within the Southeast, the Woodland time period is characterized by the establishment of semi-permanent or permanent villages occupied much, if not all, of the year, the widespread adoption of pottery use, the routine construction of mounds, and the elaboration of an incipient system of horticulture (Smith 1986, 1989). Despite evidence of changes in subsistence from the end of the Late Archaic throughout the entire Woodland period, people along the Georgia Coastal Plain continued to rely to a large extent on natural resources that had traditionally been gathered from the surrounding environment.

The time spanning the Late Archaic and Early Woodland periods is marked by the presence of transitional types of ceramics which share elements of the early fiber-tempered wares, and later sand-tempered ceramics of the Woodland period such as Deptford and St. Johns pottery types. On the north and central Georgia coast these transitional ceramics are referred to as Refuge wares. The Refuge phase is defined by the presence of incised, punctated, dentate stamped, simple stamped, and plain ceramics with a course gritty paste which developed from the pottery types of the preceding St. Simons II phase (DePratter 1976:6; Sassaman 1993). Refuge ceramics have been recovered from the surface of earlier St. Simons phase middens on Skidaway and St. Simons islands (DePratter 1976:8) and also found in association

with Deptford ceramics on St. Catherines Island (Thomas and Larsen 1979). Refuge ceramics are described as being “quite similar in form, paste, rim treatment, etc.” with Deptford ceramics (DePratter 1979:112) but many examples are also noted for having both interior and exterior decoration and/or being abraded (DePratter 1979:116). Evidence from St. Simons Island, Skidaway Island, and the Groton Plantation seventy miles inland on the Savannah River indicates that the appearance of Refuge ceramics in archeological assemblages coincided with decreasing sea levels (DePratter 1976). One midden investigated on St. Simons, which was located beneath a meter of marsh sediments, contained Refuge Plain, Simple Stamped, and St. Simons Plain ceramics with no associated shellfish (DePratter 1976:8–9). In most cases Refuge ceramics were recovered with “abundant” amounts of lithic debris and stone tools including projectile points (which were not common in preceding St. Simons middens), and the remains of deer, small mammals, turtles, and alligator but with little or no shellfish remains (DePratter 1976:8–9).

In the area around Cumberland Island, the Refuge period, which has been referred to as the Transitional period (Russo 1992:113), lasts until approximately 500 B.C. Like the Georgia coast, the transition from fiber-tempered wares to semi-fiber-tempered wares is marked by the appearance of ceramics with elements of the earlier and later periods; in this case, a transition from Orange period to St. Johns period wares of northeast Florida (Russo 1992:113). The lack of Transitional period sites is attributed in part to the changing sea levels previously noted for Georgia, which also buried sites beneath marsh sediments in northeast Florida (Russo 1992:114). Despite the general association of semi-fiber-tempering with the Late Archaic and Early Woodland periods, there is evidence that it is also present much later. On Cumberland Island, excavations at the Stafford North and Table Point sites indicates that semi-fiber-tempered wares continued in use well after 500 B.C. until possibly as late as A.D. 1 in the Middle Woodland period (Milanich 1971a:162).

The onset of the Middle Woodland period is marked by the appearance of Deptford culture and ceramics sometime around 500 B.C. (Milanich 1994:114). Deptford sites are distributed along the Atlantic coast from South Carolina to north-east Florida and along the Gulf coast from the Florida panhandle to the Tampa Bay area (Milanich 1994:112–114). Deptford peoples continued to rely heavily on resources collected from tidal creeks and marshes, usually camping on the western edge of barrier islands close to the marsh, which also provided access to nearby forest resources located on the older, more stable areas of barrier islands. The different types of Deptford pottery recognized today include Deptford Check Stamped, Linear-Check Stamped, Complicated Stamped, and Cord Marked (DePratter 1979:111–112). Deptford ceramics are distinguished from later similarly decorated wares by the quality of stamping that was applied to the vessels using baked clay or carved wooden paddles, and by the sand- and grit-tempered paste used to form the deep, cylindrical pots with rounded, or conoidal bottoms typical of the period (Milanich 1994:129).

During the Middle to Late Woodland period, ca. A.D. 100–700, there is also a distinct Swift Creek presence along the southern Georgia coast, which is recognized by the presence of Swift Creek Complicated Stamped ceramics found in coastal settings at village sites. These ceramics have been recovered from circular or horseshoe-shaped middens with burial mounds often located nearby. The presence of bell-shaped storage pits, bone and shell tools, sherd hones, and lithic tools and debris at the village sites suggests that these sites were occupied on a permanent basis (Wayne 1987:46). Linear shell middens containing Swift Creek ceramics are also found along the coast and probably represent short term sites used to collect molluscs and fish. It is suggested that coastal village Swift Creek sites, such as Evelyn and Cathead Creek in the Altamaha River delta, were settled by Swift Creek peoples moving from the interior along the Altamaha River where they maintained year round residences (Cook 1977:18; DesJean et al. 1985:173; Wayne 1987:46–47). Others have suggested that Swift Creek ceramic styles were ac-

quired through trade and also produced locally by the Deptford culture beginning sometime around A.D. 300–500 (Ashley 1992:134–135).

In addition to Swift Creek ceramics, distinctive grog-tempered ceramics associated with the Late Woodland Wilmington and St. Catherines phases of central and north Georgia are also identified in southeastern Georgia. These types of grog-tempered, stamped wares are first seen in eastern Georgia at the mouth of the Savannah River in the form of Walthour type ceramics during the Wilmington I phase (A.D. 500–600), before they are replaced by predominately Wilmington Plain and Wilmington Cord Marked pottery assemblages during the Wilmington II phase (ca. A.D. 600–1000) (DePratter 1979; Anderson 1996:264). Wilmington ceramics, which also include brushed, simple stamped, and plain wares, are subsequently replaced by St. Catherines Plain, Burnished, and Cord Marked ceramics during the St. Catherines phase (ca. A.D. 1000–1150). These later types are distinguished by their finer clay tempering and more meticulous finishing (DePratter 1979:119, 1991:180). In the case of St. Catherines Cord Marked pottery, the presence of cross cordmarking is also a key to distinguishing this Late Woodland ceramic type.

THE MISSISSIPPIAN PERIOD

The Mississippian period is generally characterized as a time in the development of Southeastern native cultures when they reached their greatest socio-economic complexity (Griffin 1967, 1985; Jennings 1974; Muller 1983; Peebles and Kus 1977; Smith 1978, 1986). This complexity is reflected in a hierarchy of site types ranging from single family habitations or “farmsteads” to multi-mound ceremonial centers, a stratified social/political organization that has been broadly compared to chiefdom level societies, specialization in the production of various traded commodities (shell, copper, salt, etc.), and a heavy reliance on maize (corn) horticulture for subsistence. Three major substages reflect the initial amalgamation of Mississippian cultures into simple chiefdoms (Early

Mississippian), the rise of complex chiefdoms that exerted broad-reaching political influences (Middle Mississippian), and the full maturation of Mississippian lifestyles such as those encountered by the first European explorers (Late Mississippian).

Unlike the Mississippian core area in the interior Southeast, the coast is seen as “geographically peripheral and culturally marginal to the main stream of Mississippian cultural development” (Cook and Pearson 1989:149). Traits associated with the Mississippian culture such as pyramidal mounds, exotic grave goods, and trade items bearing design elements attributed to the Southeastern Ceremonial Complex are rare in coastal areas and on barrier islands. There is also less reliance on agriculture until the late prehistoric period, as people continued to rely on traditional natural resources. With the introduction of an agricultural system centered on the cultivation of corn, beans, and squash, coastal inhabitants began to spend part of their annual cycle tending garden crops planted on small pockets of fertile soil and harvesting them in mid-summer (Crook 1986:19).

With respect to the current delineation of Mississippian-era cultures in the area, Cumberland Island and the mainland of southeast Georgia between the Satilla River in Georgia and the St. Johns River in Florida has been defined as the St. Marys Region by Russo (1992:107), in part due to its common perception as a transitional zone between the Savannah culture of central and north Georgia and the St. Johns culture of northeast Florida. The Mississippian period on the central and north Georgia coast has been divided into the Savannah (ca. A.D. 1150–A.D. 1300) and Irene (ca. A.D. 1300–A.D. 1550) phases, based on their particular ceramic assemblages (Cook and Pearson 1989:149). In southeastern Georgia, in the St. Marys Region, the Mississippian period is defined as the Savannah/St. Johns II (ca. A.D. 800–A.D. 1500) based on the overlapping of the Savannah and St. Johns culture areas (Russo 1992:116). Within the St. Marys Region, Savannah sites have been generally identified based on the predominance of sand-tempered plain and cordmarked wares in archeological assemblages. St. Johns sites are

defined by larger percentages of plain and check-stamped wares tempered with sponge spicules which impart a distinctive “chalky” texture to the ceramics (Russo 1992:116). Russo (1992:117–118) points out that at least some sand-tempered Savannah wares in the region contain sponge spicules, while some St. Johns sherds are more sandy than chalky. While both Savannah and St. Johns wares are recovered from shell middens throughout the region, Savannah sites tend to be more common in southern Georgia and Amelia Island, with St. Johns sites distributed along the St. Johns River (Russo 1992:118).

Specific evidence of Mississippian cultural traits are relatively rare in the St. Marys Region and the Georgia coast in general. To date, the only pyramidal mound identified on the Georgia coast has been the Irene Mound near Savannah, Georgia, which is actually identified as a Savannah phase structure (Cook and Pearson 1989:149). There is a distinct lack of Irene-phase pyramidal mounds on the Georgia coast, suggesting that a “decentralization and dispersal of population after the Savannah phase” took place (Cook and Pearson 1989:150). To the south of the St. Marys Region at least three truncated, or pyramidal mounds have been identified, and are associated with the St. Johns IIb period (ca. A.D. 1050–A.D. 1513) (Milanich 1994:269). At the Mount Royal site, on the lower St. Johns River, numerous artifacts associated with the Southeastern Ceremonial Complex were recovered by the noted antiquarian C.B. Moore in the late nineteenth century. These included a copper plate displaying a forked-eye motif, copper beads and ornaments, greenstone celts, ceramic biconical tubes, and uniquely shaped fired-clay vessels believed to be used for ceremonial purposes (Milanich 1994:270–271). No pyramidal mounds are known for the St. Marys Region, although the Shields Mound, also investigated by Moore, is located on the southern periphery of the region.

Within the St. Marys Region, several sand burial mounds have been identified, including a number located on Cumberland Island. On the mainland, adjacent to Cumberland Island, C.B. Moore excavated at least two mounds containing artifacts similar to those recovered in the St. Johns

area. At the Fairview Mound, measuring 38 feet across the base and 2 feet 8 inches high, Moore recovered a sheet copper ornament with repoussé decoration (Moore 1897:10). The Woodbine Mound, located inland on the Satilla River and measuring 40 feet across and 4 feet 9 inches in height, contained two polished “celts, ornaments of sheet copper, and a sheet copper ring (Moore 1897:11, 13). On Cumberland Island at least three sand burial mounds have been identified—the Stafford Airfield Mound (CUIS-9.01), Plum Orchard (CUIS-17.01), and the High Point Mound (CUIS-35.01). Based on surface collections made at the Stafford Airfield Mound, Crusoe (1973a:1) believed the mound dated to the end of the Deptford and beginning of the St. Catherines periods (ca. A.D. 500–800). The Plum Orchard Mound was believed to date to the later St. Catherines period based on sand-tempered ceramic sherds surface collected there (Crusoe 1973b:35). Little else is known about these sites, which have been vandalized by looting and the possible use of the Plum Orchard mound to bury Yellow Fever victims in the nineteenth century (Crusoe 1973b:34). Less is known about the High Point Mound which has also been damaged by undocumented excavations. Moore (1897) indicated he knew of the High Point Mound by plotting its location but does not discuss it in his reports.

THE HISTORIC PERIOD

The Historic Period of Cumberland Island begins with the arrival of European explorers off the Southeastern coast in the early 16th century. The first Europeans to encounter Indians of southeastern Georgia, were the Spanish sailing from their new colonies in the Caribbean. The Guale who inhabited the central and north Georgia coast were the descendents of those peoples associated by archeologists with the Savannah culture of the late prehistoric period. Below the Altamaha River, Timucuan speaking tribes occupied southeast Georgia and Cumberland Island. In this transitional zone, these tribes like the Tacatacuru of Cumberland Island, were believed to be related to those

Timucuan tribes of northeast and central Florida, although they also shared some common traits with the central and north Georgia coast, at least in terms of material culture. Analysis of ceramics associated with the Timucuan speaking Tacatacuru shows they manufactured sherd-tempered ceramics similar to those extending from the Savannah period as far back as the Wilmington period (Milanich 1971b:118). It is suggested (Milanich 1971b:119) that the inhabitants of southeast Georgia were originally related to the Savannah cultures but lost cultural contact with them and eventually adopted some aspects of Timucuan culture, including the language, by the time of European contact.

The earliest Spanish arrivals spent the first half of the 16th century exploring the Southeast and capturing slaves. Some attempts were made to establish a foothold in the Southeast as early as 1525 when two ships under the command of Pedro de Quexos traveled along the Southeastern coast to reconnoiter for favorable locations to establish a new colony. By August 1526 a settlement was located near the mouth of a river they dubbed the Jordan (possibly the Santee) but it proved to be unsuitable to the colonists who, led by Lucas Vázquez De Ayllón, moved south to a new location some 40 or 45 leagues south to the vicinity of Sapelo Sound (Hoffman 1992:35). The colony of San Miguel de Gualdape was only in existence for six weeks before it was abandoned after many of the colonists, including Ayllón, died of disease and starvation (Hoffman 1992:36).

In the latter half of the 16th century, Spanish claims to the territory of La Florida were contested by the French who established colonies at present day Parris Island and along the St. Johns River. The short-lived colony of Charlesfort on Parris Island was abandoned before it could be attacked by the Spanish. Fort Caroline, established by René Goulaine de Laudonnière on the St. Johns River, near present day Jacksonville, was not as fortunate. The fort was captured and destroyed by the Spanish on September 20, 1565, while most of its garrison was away to attack the newly established town of St. Augustine. This force also met with disaster when its ships were wrecked by a hurricane and its survivors captured and executed by the Span-

ish. Although French colonies were eliminated along the Southeastern coast, the Spanish still had to contend with French and English pirates who constantly threatened Spanish shipping and towns on the Atlantic.

St. Augustine was established by Pedro Menéndez de Avilés September 8, 1565, to provide a safe haven for homeward bound treasure fleets, as well as a base against French settlements like Fort Caroline. To maintain their claims to the Southeast the Spanish also constructed small forts along the coast including one at Cumberland Island, known to the Spanish at the time as San Pedro. Fort San Pedro was built somewhere on the southern end of the island in 1569 at the mouth of the St. Marys River (Chatelain 1941:45), although its exact location has never been identified. These series of small outposts extending from Matanzas inlet to Santa Elena were connected by an inland waterway which the Spanish used to resupply and communicate with one another rather than be exposed to storms and dangers on the open ocean or subject to winds and tides at harbor entrances (Chatelain 1941:40). The fort built on San Pedro was a small and simple triangular structure of logs, earth, and fascines equipped with four pieces of artillery and garrisoned by eighty to one hundred men (Chatelain 1941:131–132). Although San Pedro and the other forts were built to protect Spanish claims in the region, they were poorly supplied and were subject to periodic attacks themselves by pirates, who were aided by Timucuan allies. These attacks and inefficient efforts to maintain the forts and other settlements eventually led to their abandonment, including the settlement of Santa Elena on Parris Island in 1586.

With St. Augustine as the only remaining permanent Spanish settlement on the Atlantic coast, attempts were made to pacify the Indians through missionization. This was done first unsuccessfully by the Jesuits, and later the Franciscans. The Franciscans arrived on San Pedro in 1587, about the time that the Spanish capital of Santa Elena was abandoned in favor of the more defensible St. Augustine. The mission of San Pedro de Mocamo was built on the south end of the island along the inland passage, near the ruins of the old fort San

Pedro (Torres 1977:10). This area was inhabited by the Tacatacuru who had previously been allied with the French. Sometime after 1595, a second mission station, San Pedro y San Pablo de Porturiba, was constructed on the north end of the island (Torres 1977:11). Under the Spanish, Indians were encouraged to settle near principal missions such as San Pedro de Mocamo, a doctrina, or secondary missions like San Pedro y San Pablo de Porturiba. In 1597 Guale Indians revolted against Spanish authority, by attacking the missions and killing a number of Franciscan priests. When attacks were directed against the predominantly Timucuan population and missions on San Pedro they were driven off by those Timucuans who had remained loyal to the Spanish. Despite this victory, the missions on San Pedro were abandoned for five years in the wake of the revolt.

When they returned in 1602, the Franciscans began to rebuild San Pedro de Mocamo. Historic records are unclear as to the fate of San Pedro y San Pablo de Puturiba. As of 1655, a list of missions only gives the name of San Pedro de Mocamo, while a later list in 1659 does give both names but it is uncertain whether the mission was still located on San Pedro (Torres 1977:15). By 1680, the mission list makes reference to neither mission, instead listing a mission called Señor San Felipe de Athuluteca, a Guale mission (Torres 1977:15). This shift from a predominantly Timucuan population on San Pedro to Guale and an eventual abandonment of the Georgia missions entirely, was brought about by the establishment and the spread of English settlements in Virginia and the increasing slave trade encouraged by the English with various Indian allies. By 1661, Indians armed with English firearms began attacking the Spanish missions of coastal Georgia.

In the spring of 1683, Spanish missions on the Southeast coast were attacked by a fleet of English and French pirates led by Monsieur de Grammont who had originally sought to plunder St. Augustine. Faced with the threat of future raids, nearly all the Yamassee abandoned the Spanish mission towns they had settled less than two decades before, cutting the Indian populations of Guale and Mocama in half (Worth 1995:36). Among the few

mission towns that remained occupied in Georgia following the Grammont raid were the Yamacree, Guale and Mocama villages of San Simón, Santo Domingo de Asajo and San Buenaventura de Guadalquini on St. Simons Island, the Guale mission of San Joseph de Sapala on Sapelo Island, and the Guale mission of San Phelipe on Cumberland Island. Continued pressure from English colonists and their Indian allies led to the eventual abandonment of the coastal islands in Georgia in favor of missions clustered on Amelia Island and near the mouth of the St. Johns River (Worth 1995:40–42). Today, the remains of these missions have yet to be confidently identified on Cumberland Island, although San Pedro de Mocama is thought to have been located to the north of Dungeness Wharf where Spanish ceramics have been recovered along the beach. Further north, the visita of San Pedro y San Pablo de Puturiba is thought to have been located along the Brickkiln River where more Spanish ceramics have been identified.

With the abandonment of the missions and sea islands much of the Georgia coastal area became a no-mans land devoid of the Indian tribes who had inhabited the region for centuries. Although the Spanish still maintained claims to the territory, they remained south of the St. Marys River following the Queen Anne's War (1702–1713) which further decimated their missions throughout Florida. English colonists in South Carolina were also slow to fill the vacuum left in the wake of the war due to hostilities which arose with their Yamacree Indian allies. The Yamacree were eventually defeated but this did not end hostilities with the Indians who escaped to Spanish territory. The routing of the Yamacree and other native groups that had previously occupied eastern Georgia and South Carolina prior to 1716 now left the English colony's Indian trade disrupted and their southeastern frontier—the territory extending from the Savannah River to the St. Johns River—practically uninhabited with no Indian allies to act as a buffer between them and the Spanish and French (Coleman 1976:8). In the mean time, Governor Sir Francis Nicholson, authorized the construction of a fort near the mouth of the Altamaha River to assert English claims to the territory (Wright 1971:10). The existence

of Fort King George, constructed in 1721, was a short-lived but contentious issue between the English and Spanish. Spanish inspired raids by Yamacree Indians bypassed Fort King George and other Georgia outposts to attack South Carolina. The fort was also as unpopular with its own English inhabitants as it was with the Spanish; and when it burned to the ground in 1726, it was permanently abandoned (Wright 1971:11).

The English solution to the problem of the “debatable land” was a charter which created the Board of Trustees for Establishing the Colony of Georgia in America signed by the king of England in 1732. The colony was to be run for twenty-one years by the Board of Trustees whose members were named in the charter (Coleman 1976:17). The Trustees were comprised of many wealthy philanthropists hoping to relieve the suffering of England's poor by offering them another chance in the New World. Foremost among them were James Vernon and John Viscount Percival, the Earl of Egmont (Coleman 1976:17). The colony would not only be settled by England's “worthy poor” as farmer-soldiers providing a bulwark against Spanish and Indian aggression, they would also produce goods that would enrich England herself.

In 1733, the first of these colonists landed in Georgia along with James Oglethorpe, a member of the Trustees and a principal motivator for the settlement of Georgia. They set about clearing land and building homes at a site known as Yamacraw Bluff at a place not far from the mouth of the Savannah River, which lent its name to the new town, Savannah (not to be confused with the older settlement, Savannah Town, located farther up river at the fall line). As more settlers arrived new settlements were established in outlying areas. One of these areas was the original site of Fort King George which was occupied by Scottish Highlanders, and came to be known as Darien. The town of Frederica and two forts were also built on St. Simons Island in 1736 (Coleman 1976:50).

General Oglethorpe also sought to extend Georgia's defenses farther south to Cumberland Island, which was still known at that time as San Pedro. In March 1736, Oglethorpe, traveling with a party of Yamacraw Indians, including the chief, To-

mochichi, and his nephew Toonahowi, visited San Pedro. It was at this time that Toonahowi suggested naming the island after the Duke of Cumberland who had befriended him on an earlier visit to England. The construction of Cumberland Island's defenses followed a similar pattern as those on St. Simons. A site for what became Fort Saint Andrews was chosen on high bluffs overlooking the inland passage on the northwest coast of Cumberland Island. Later another fort, Prince William, would be built at the southern end of the island to cover the entrance to Cumberland Sound and the inland waterway. Neither fort was as substantial as Fort Frederica, but were intended to provide an early warning of any attacks that might come from the Spanish.

Tensions between England and Spain were increasing after many years of dispute concerning not only the settlement of Georgia, but also wood-cutting in Honduras, trade with Spanish colonies, and depredations by the Spanish Guarda Costa (coast guard) (Wright 1971:85; Coleman 1976:63). The war which eventually broke out in 1739, and was known as the War of Jenkin's Ear, was superseded by King George's War (1744–1748), which began when the French attacked Port Royal, Nova Scotia, in 1744.

In the spring of 1740 Oglethorpe invaded Florida with his regiment, militia, Indian allies and naval force with the intention of capturing St. Augustine. After years of preparation and strengthening of the fort and city defenses, Oglethorpe's forces were forced to settle for a long siege of St. Augustine, a situation for which the Spanish were better prepared. The Spanish were able to hold out until the onset of the hurricane season which forced the English naval force to eventually withdraw, effectively ending any blockade of St. Augustine (Wright 1971:92; Coleman 1976:67). Oglethorpe's army returned to Frederica where they began preparing for a Spanish invasion that the English were sure would materialize after their unsuccessful siege of St. Augustine.

In June 1742 a Spanish force of 4000 troops and 36 ships under the command of the Governor of Florida, Manuel de Montiano, invaded St. Simons Island. A detachment of the Spanish invasion

force had already attacked Fort Prince William but was repulsed. This force encountered General Oglethorpe in the vicinity of Fort Saint Andrews as he made his way to Cumberland Island with reinforcements. After gaining the fort, Oglethorpe abandoned it in favor of leaving reinforcements at Fort Prince William while he returned to Frederica to lead its defense. After the Spanish landed at Gascoigne Bluff on St. Simons Island in early July they fought a series of engagements with the English including an ambush at what became known as Bloody Marsh. A naval attack on Fort Frederica was also repulsed and the Spanish abandoned their invasion of St. Simons, in part because they believed English reinforcements were on their way. As they returned to St. Augustine, the Spanish occupied Fort Saint Andrew long enough to rest before burning it to the ground. After leaving Fort Saint Andrews in ruins, the Spanish made another attempt to capture Fort Prince William but withdrew after a three hour bombardment. These hostilities were eventually brought to an end, if only temporarily, by the Treaty of Aix-la-Chapelle on October 18, 1748.

In 1752, the Board of Trustees that administered Georgia turned in its charter and relinquished control of the colony to the Crown, and the colony reverted to royal control (Coleman 1976:174). In 1754, an Executive Council was established for Georgia that was made up of royal administrators, former assistants to the Trustees, and Georgia's new ruling elite made up of South Carolina planters, who moved to Georgia when slavery was legalized in 1750 (Gallay 1988:257). Among the planters was Jonathan Bryan who had moved to Georgia with forty to fifty slaves and was an original appointee to the Executive Council (Gallay 1988:258). With his position on the council, Bryan was able to petition for, and receive tracts of the most desirable land located in the territory between the Altamaha and Savannah Rivers. The area below the Altamaha River remained relatively uninhabited in the mid-eighteenth century but there is some evidence small plantations were started on Cumberland Island (Torres 1977:51). Most of Cumberland Island's inhabitants at this time were characterized as outlaws evading either English or

Spanish justice, and squatters who lived informally by hunting and farming, or cutting timber from the vast reserves of live oak.

Much of the ambiguity concerning claims to the territory between the Altamaha and St. Marys Rivers were eventually settled with the peace treaty in December 1763 which ended the French and Indian War. This was two months after a royal proclamation in October had already set the northern boundary of Florida (ceded to England in the treaty) at the St. Marys River and annexed the territory between it and the Altamaha River for Georgia (Cadle 1991:41). Although the war had been fought mainly in the northern colonies and Canada; Spain, which had been an ally of France, gave up territory as well, which had already been lost to English colonization.

In 1765, Jonathan Bryan acquired 800 acres on the southern end of Cumberland Island, including an area he referred to as Dungeness, and was granted another two tracts totalling 3100 acres by April 1767 (Bullard 2003:54). Over the course of the next few years, Bryan continued to petition for land and was granted another 2000 acres, or purchased it from relatives who had been granted the land (Bullard 2003:54). Eventually, he was able to acquire 10,700 acres on Cumberland and Little Cumberland Islands (Gallay 1988:274; Bullard 1993:767). In August 1770, Bryan, who had been expelled from the Executive Council for “patriot activities”, sold off his Cumberland Island holdings to Thomas Lynch and Alexander Rose of Charleston (Gallay 1988:258). Lynch, and later his heirs, held on to much of their original half-interest in the land, while Rose quickly disposed of his. From 1770 to 1783 Rose’s half-interest passed to John McQueen, who eventually transferred it to John Banks on August 1, 1783, as part of a debt payment (Bullard 1993:768). Banks did not hold onto the land very long before his undivided half-interest was passed on to General Nathanael Greene on August 11, 1783. Greene acquired the land as part of a convoluted business deal with Banks, who had contracted with Greene to provide provisions to the American army but then was unable to fulfill the contract (Bullard 1993:774). Greene, who was himself in debt, pursued various

business ventures to sell timber from his newly acquired holdings before he died June 19, 1786 (Bullard 1993:776).

At the time of his death, Greene lived at his Mulberry Grove plantation, near Savannah with his wife, Catherine, and family. On May 31, 1796, Catherine married Phineas Miller a friend of the family. In 1797 the plantation was put up for sale and the family made plans to move to Cumberland Island (Bullard 1993:778). On Cumberland Island Phineas Miller petitioned for a division of the lands held by the Greenes and the Lynch heirs since they held the land in-common, and it was necessary to officially partition it so that it could be sold (Bullard 2003:96). During the period when surveys were being made for the land division, the Greene family was living on Cumberland Island and settled at Dungeness in Tract 1. A new home was built overlooking Beach Creek on the site of a large shell midden. The tabby walls of the new mansion stood four stories high and enclosed forty rooms, four chimneys, and sixteen fireplaces (Figure 2) surrounded by gardens and orchards. It is unknown who actually designed the Dungeness mansion but it is believed to have been Phineas Miller, who died December 7, 1803 (Torres 1977:83).

After Catherine Greene died September 2, 1814, the Dungeness plantation was left to her daughter Louisa. Under Louisa’s guidance, the Dungeness gardens were expanded with the introduction of new exotic species of plants. Along with cotton, oranges and olives were grown on the estate and sold to markets in Savannah (Torres 1977:123). Not long after Louisa inherited Dungeness, the British occupied Cumberland Island on January 9, 1815, towards the close of the War of 1812. The British force, under the command of Rear Admiral Sir George Cockburn, encamped near present day Cumberland Wharf while the admiral made his headquarters in the mansion itself. Aside from raids to nearby St. Marys and Point Peter on the mainland, the British occupation of Cumberland Island is noted mainly for the policy of confiscating slaves from Cumberland Island and the surrounding area and enticing them to enlist in the army or settle in other colonies (Bullard 1983). The British force did not remain long

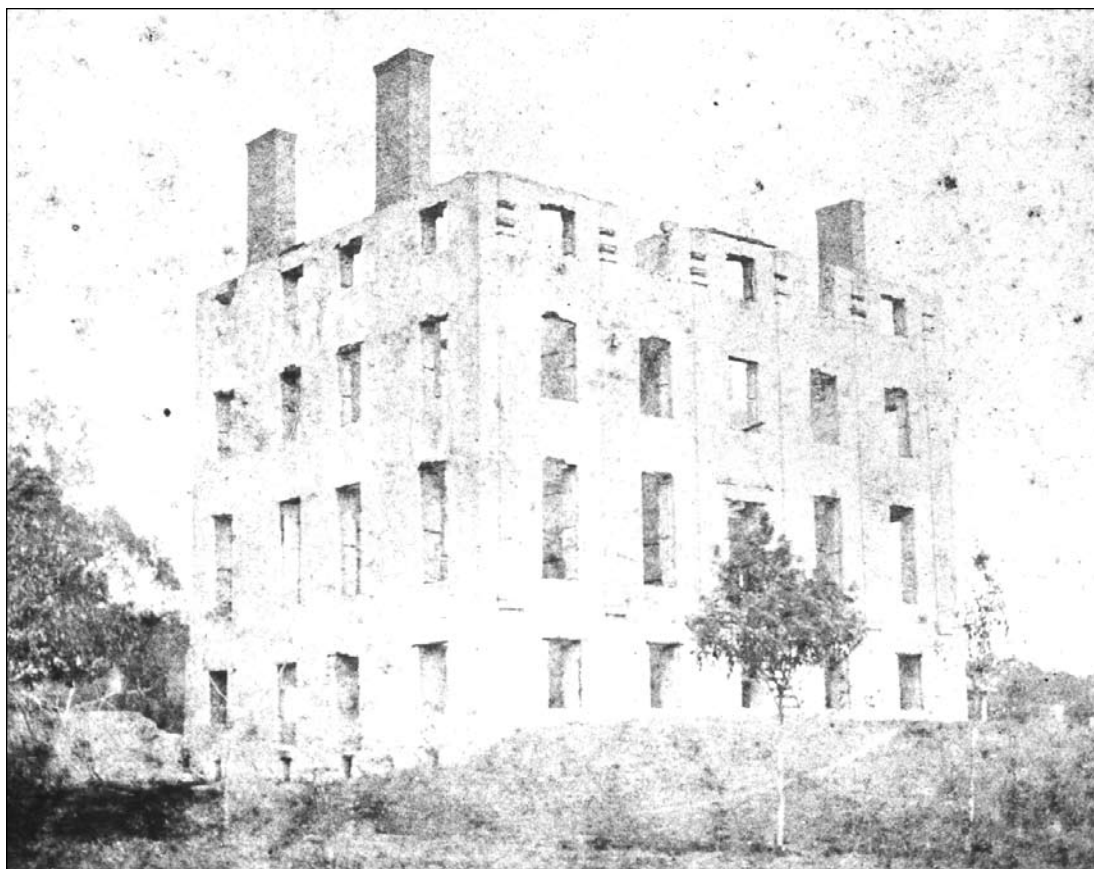


Figure 2. Ruins of the Greene-Miller Dungeness mansion as they looked ca. 1880.

and evacuated the island March 18, sailing away with many of Cumberland Island's slaves. Louisa managed the estate until her death on April 24, 1831. Because she and her husband, James Shaw, who had died earlier, had no children of their own, Dungeness was left to her favorite nephew Phineas Miller Nightingale, who had helped to manage the plantation over the years (Torres 1977:125).

P.M. Nightingale remained at Dungeness until the Civil War when he moved to the mainland. With the outbreak of the Civil War, the plantation system and way of life on Cumberland Island that had begun there at the end of the eighteenth century came to an end. The Georgia sea islands were quickly isolated by the Union Navy and by March 1862 most of them were in Union hands, including Cumberland Island. Most of Cumberland Island's white inhabitants had already evacuated the island before it was captured. Many of the Cumberland Island slaves, however, were rounded up and re-

moved to Amelia Island by the military authorities (Torres 1977:151). Some of the former slaves were allowed to return to Cumberland Island to forage and hunt to support themselves and even resettle. Later, slaves were being resettled by the Bureau of Refugees, Freedmen, and Abandoned Lands. The Freedmen's Bureau, as it came to be known, issued Circular 13 in July 1865, which detailed the distribution of land within an area known as the Sherman Reservation that had originated in Special Orders 15 issued by General William Tecumseh Sherman in January 1865, and referred to as the Sea Island Circular. The reservation was to include the barrier islands and mainland areas within thirty miles of the coast from Charleston to Florida that had been abandoned by white owners (Bullard 2003:162). Consequently, several freedmen's settlements sprang up on Cumberland Island at Dungeness, Stafford's estate (possibly between

Little Old House Creek and the Grayfield landing), and Brick Hill Bluff (Bullard 2003:166–168).

The Dungeness mansion, which had fallen into disrepair, was destroyed by fire in 1866, leaving only the tabby shell of walls and chimneys. P.M. Nightingale, who was living on his rice plantation near Brunswick, was heavily in debt and could not rebuild and so arranged to pay his largest debt by turning over Dungeness to the estate of Edmund Molyneux in 1870 (Bullard 2003:165). In 1880 the property was sold to a former Confederate general, W.G.M. Davis. In the short year that Davis owned the land, his grandson was accidentally and fatally shot by his son B.M. Davis, who in turn died not long after. Both the son and grandson were buried in the Greene-Miller cemetery among the ancestors of Nightingale (Bullard 2003:182–183). Not long afterward, Davis was convinced to sell the 4000 acre Dungeness property to Thomas Carnegie, who had the ruins torn down and a new mansion built. The new Dungeness, begun in February 1884 and completed in January 1885 was a Queen Anne style home measuring 120 feet by 56 feet, two stories high with an attic on top, and a 100 foot tower on its east end (Torres 1977:271). Beyond the new mansion the grounds of the Dungeness estate still retained the old tabby house of the Greene period that had originally been connected to the mansion by a high tabby wall. In addition to the new mansion, a large cottage was built for son Thomas Jr., which was still under construction when the elder Thomas died in 1886 (Torres 1977:167). At its height, the Carnegie estate of Cumberland Island encompassed a network of building complexes, farmland, forest, golf course and other recreational facilities that stretched from South Point to Table Point, an area totalling 16,500 acres (Bullard 2003:254).

Lucy Carnegie died in January 1916 and was buried in the new family cemetery next to the Main Road north of the Dungeness mansion. Before her death, Lucy had created a trust for her children to allow them to remain on Cumberland Island as long as they wanted to, although it prevented them from selling any of the land while any were

still alive (Torres 1977:215). In addition to the mansions and associated utilities, maintenance was also required for numerous smaller buildings, agricultural fields, gardens, boats, roads, and a large work force. The burden of managing these extensive holdings, Lucy's death, a lack of interest on the part of the Carnegie children and grandchildren, and the Great Depression all eventually took their toll on the Carnegie estate (Torres 1977:215). The Dungeness mansion and facilities fell into an increasing state of disrepair until it too was destroyed by fire in June 1959.

Aside from its structures, the Carnegie estate was also coming under increasing pressure by various groups wanting to purchase the land for development. In 1960 the Carnegie heirs formed the Cumberland Island Company as a way to address the growing concerns over the interest of others in acquiring the lands on Cumberland Island. Among the primary concerns of the company was the division of the land amongst the various heirs, and what course of action to take if and when it came time to sell the property (Bullard 2003:273). The trust prohibiting the division of the Carnegie lands on Cumberland Island ended in 1962 with the death of Lucy Perkins. In 1964 the property was divided into ten tracts and distributed among the five families representing the Carnegie heirs, with each family receiving a north and south tract (Bullard 2003:274–275). Among the interested parties looking to buy Cumberland Island land was the National Park Service. NPS interest in acquiring Cumberland Island for a national seashore was assisted by a number of private foundations concerned with the preservation of the island. By October 1970 some 8,300 acres had been purchased by the Andrew W. Mellon Foundation (AWMF) from various Carnegie family members and developer Charles Fraser that would be then held in trust by the NPF until Congress authorized the establishment of the park (Bullard 2003:285). On October 23, 1972, Public Law 92-536 was enacted by Congress to establish Cumberland Island National Seashore.



Chapter 4

The Dungeness Historic District

As part of Cumberland Island National Seashore, the Dungeness Historic District is located at the southern end of Cumberland Island and comprises an area of approximately 206 acres (Figure 3). The district is bounded on the south by saltwater marsh and Beach Creek, and on the west by Cumberland Sound. The northern boundary begins 550 feet south of the Sea Camp dock and turns south for 600 feet along the east side of River Road before turning and running east again on Nightingale Avenue as far as the Main Road. The northern boundary turns south along the Main Road for 1400 feet then turns to the east again to the dune line. The eastern boundary follows the dune line south to a point southeast of Beach Field.

The district occupies an area of Cumberland Island that was settled by Timucuan-speaking Indians when the Spanish first arrived in the 16th century and constructed a small fort in the area. Although remains of this fort have never been identified it is believed to have been in the Dungeness area near the Timucuan village of Tacatacuru (Milanich 1971b:115). When the fort was abandoned, the Spanish attempted to pacify the local tribes by establishing a mission near Tacatacuru in the area now believed to be the Dungeness Wharf site (CUIS-6) (Milanich 1971b:115). It is apparent that the Timucuans and their ancestors had been occupying the Dungeness area for centuries based on the numerous small shell middens identified by archeologists along the marsh and river edge. The midden deposits are generally 20 to 30 feet in diameter and believed to be related to individual house sites that extended from the vicinity of the Carnegie mansion along the intercoastal waterway past the Dungeness wharf for a quarter of a mile (Milanich 1971b:114). Currently these prehistoric remains are divided into two main sites— Dungeness South (CUIS-5) and Dungeness Wharf (CUIS-6). Dungeness South stretches from Garden Point

to Beach Field along the south end of the historic district. Dungeness Wharf extends from the dock to the northern boundary of the Dungeness Historic District near the Sea Camp where exposures of shell accumulations are readily visible eroding from the bluffs along the river.

After the Dungeness area was acquired by Jonathan Bryan in 1767 it was eventually passed onto the heirs of Nathaniel Greene who moved to Dungeness in 1800. By this time the island had been surveyed and divided into twelve main tracts. General Greene's estate received Tracts 1, 3, 5, 8, 9, and 12, while the Lynch heirs received Tracts 2, 4, 6, 7, 10 and 11 (Bullard 1993:780–781). Much of what is now the Dungeness Historic District is located in Tract 1. The remainder of the district was located on Tract 2 which was owned by the Lynch family until it was acquired by Catherine's grandson P.M. Nightingale in 1831 (Bullard 2001:13).

When the Greene-Miller family arrived on Cumberland Island they began construction of a mansion overlooking Beach Creek. At the time it is said that a large shell midden existed on the site but the only known description of the prehistoric midden was written by Frederick A. Ober in 1880 for *Lippincott's Magazine of Popular Literature and Science*, eighty years after the mound was levelled.

A mound of shells, the accumulation of centuries and the result of countless Indian feasts, rose high above the southern marsh of Cumberland. A forest of live-oaks surrounded it on three sides, and at its feet ran the broad creek which wound through the marsh for miles, seeking the Sound at a point opposite the Florida shore.

The summit of this shell mound was levelled for the site of the house, and a terraced area of an acre or more constructed of the

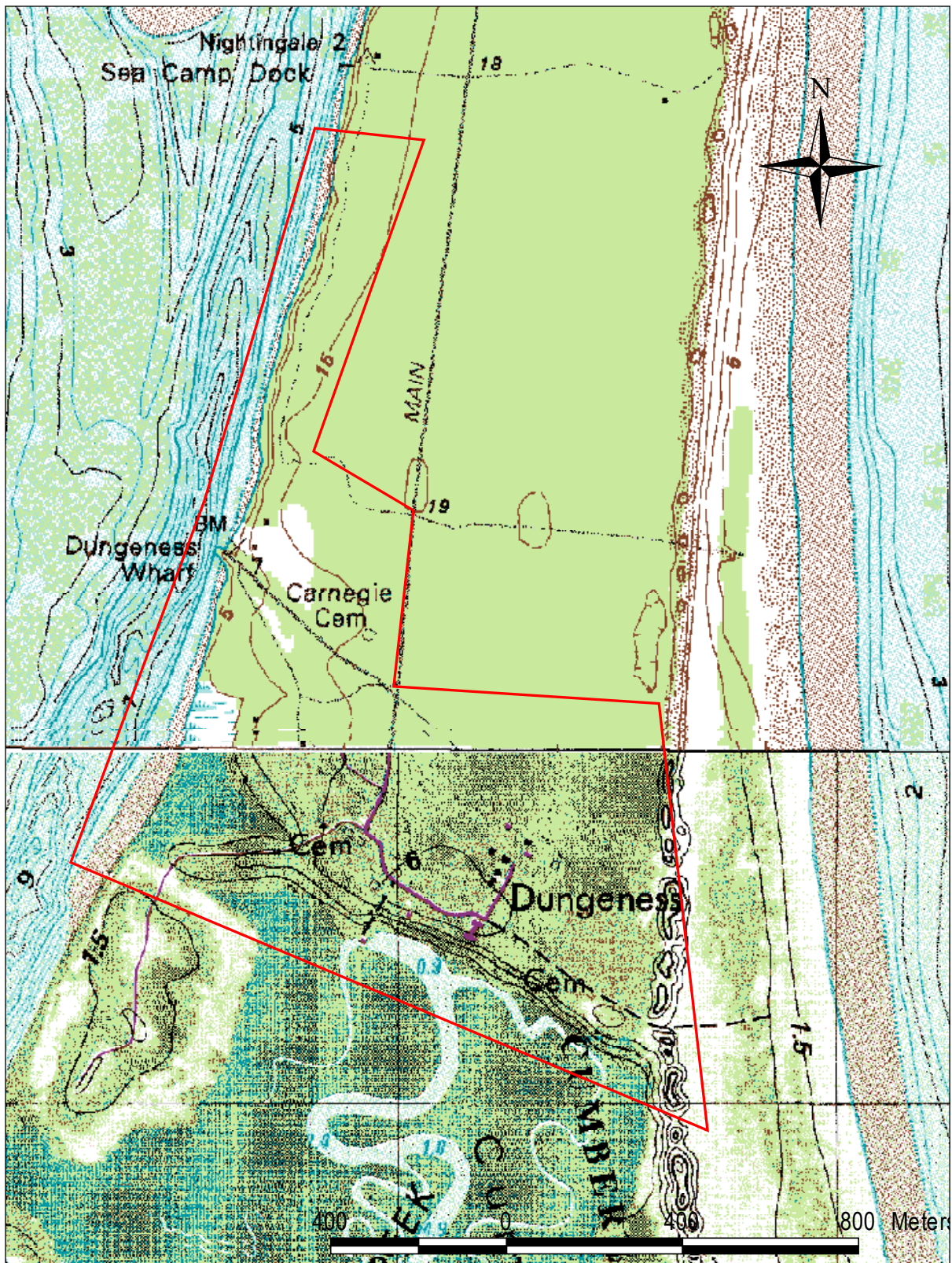


Figure 3. Boundaries of the Dungeness Historic District (red line).

shells. Upon this base, raised above the general level of the island, its foundations were laid. (quoted in Ehrenhard 1976:62)

The mansion was built with tabby blocks formed from lime (produced from shell), sand, water, and shell aggregate. When it was completed ca. 1803 the building measured sixty-three feet by forty-five feet, eight inches and stood approximately sixty-eight feet from the terrace to the eaves (Bullard 2003:100) (Figure 2). The nearby shell middens provided the material for producing the tabby block used to build the mansion. According to at least one contemporary of the Greene-Miller family—Thomas Spalding, a plantation owner on Sapelo Island, Georgia—ten bushels each of lime, shell, sand, and water were needed to produce one 16 cubic foot section of tabby wall (Sullivan 1998:2).

Surrounding the mansion were acres of gardens and orchards that gave way to fields of Sea Island cotton. The 1802 McKinnon map of Cumberland Island shows the cotton fields at Dungeness extended from the Atlantic beach (Beach Field) across the island and north along the river bank (Figure 4). As of 1800, when the field work for the map was undertaken, the mansion at Dungeness was not yet built although it appears as if landscaping or gardens were in place

near Garden Point. To the south of the Dungeness Wharf a complex of twelve structures existed along a small inlet. It has been suggested (Zeichner 1987:18) that these structures represent slave housing. To date, slave cabin complexes like those recorded at Stafford and Rayfield plantations have never been identified at Dungeness even though the Greene-Miller family undoubtedly owned numerous slaves up to the Civil War. Another map

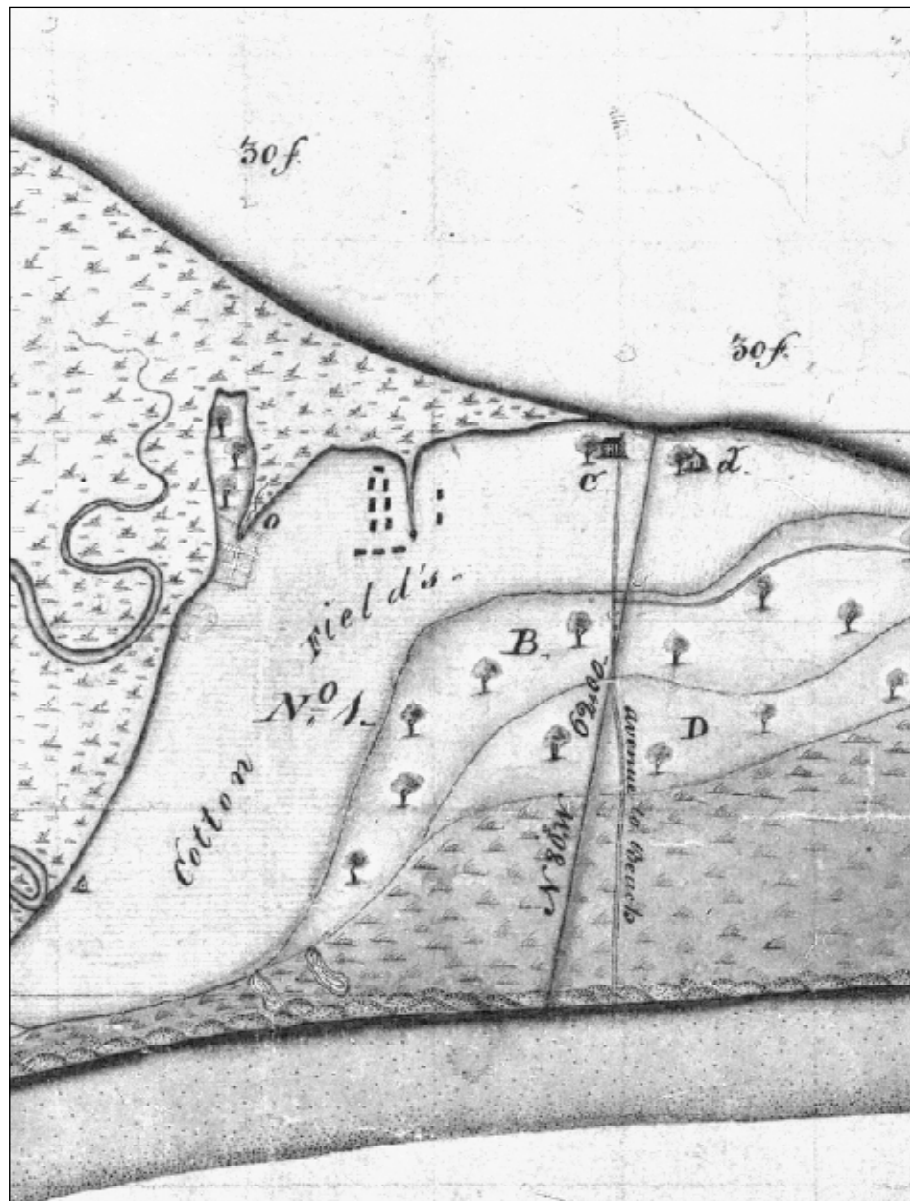


Figure 4. Section of the 1802 McKinnon map of Cumberland Island illustrating possible slave structures north of Garden Point (top of the map is oriented to the west).

produced about 1827 by P.H. Perrault (Map of St. Mary's Harbour) shows another complex of ten structures straddling the Main Road north of the Dungeness mansion which also possibly represent slave cabins (Figure 5) (Zeichner 1987:18). The absence of these buildings on the McKinnon map may mean they were built later, possibly to replace the earlier ones, which may have been destroyed in one of several hurricanes that swept Cumberland Island in 1804, 1813, and 1824 (Bullard 1995:189–190). One account of the 1813 hurricane's aftermath reported "scarcely a building left on its foundations" (Bullard 1995:190).

By 1880 all that was left of the mansion were its tabby walls described by Ober in his magazine article (Figure 2). When the land was bought by

Thomas Carnegie, the ruins were torn down and a new mansion built in its place. The Carnegies maintained much of the surrounding gardens that had originally been started by Catherine decades before, although with some eventual changes. The upper and lower garden terraces that were traditionally separated by a hedge that followed the natural contour of the river bank overlooking Beach Creek were eventually divided by a large masonry wall that was constructed some time between 1900 and 1905 (Zeichner 1987:28). Most of the other features related to the Dungeness Plantation era also disappeared overtime. The possible slave cabin sites indicated on the historic maps of 1802 and 1827 have never been identified. The twelve structures illustrated on McKinnon's 1802

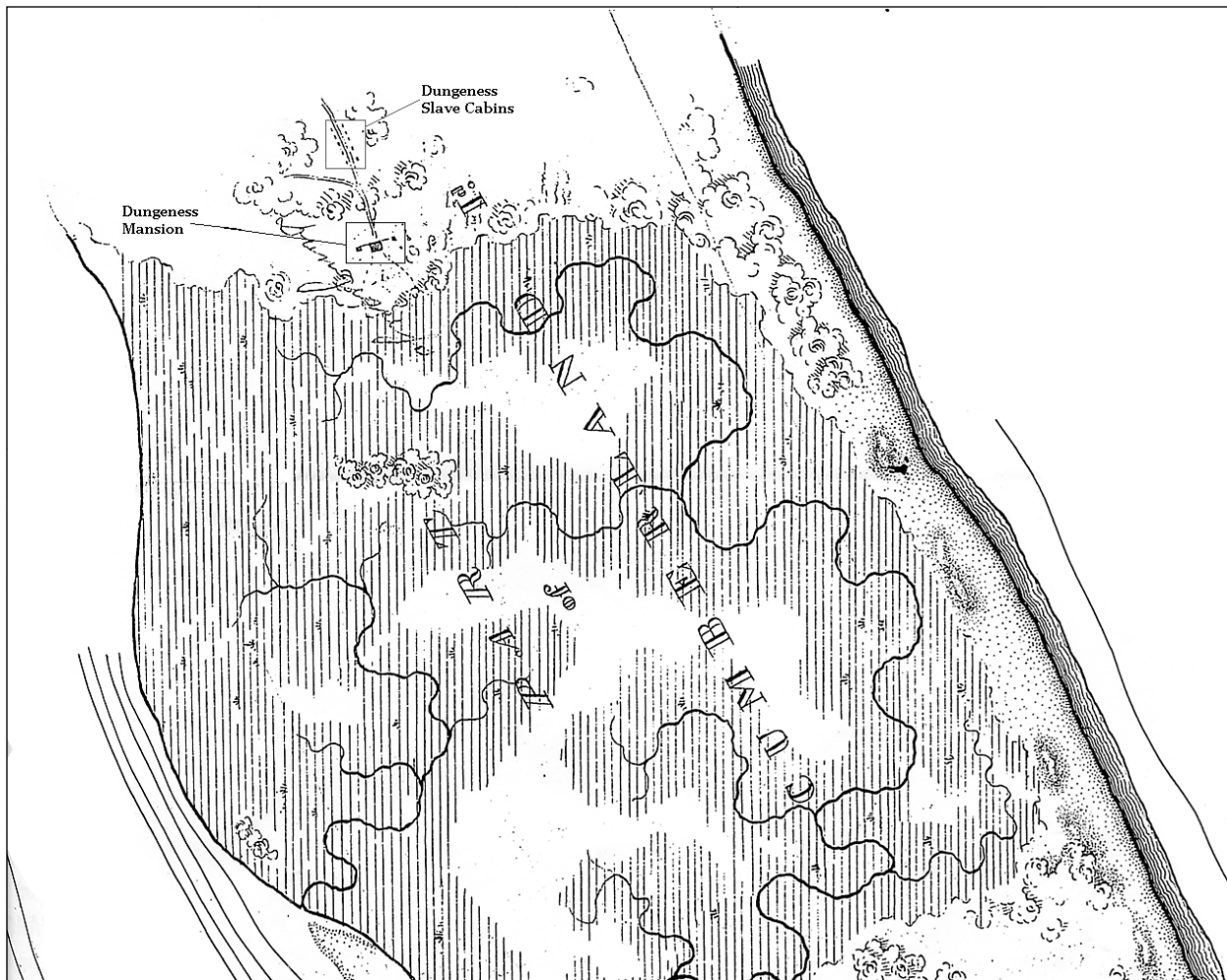


Figure 5. Section of the 1827 Perrault map showing the Dungeness mansion at the end of the Main Road and possible slave cabins to the north.

map are located on the site of a large cottage built by the Carnegies for Thomas Morrison Carnegie, Jr. In addition to the cottage, there were gardens and artificial pond enclosed by a masonry wall known as the Duck Pond (Zeichner 1987:31). The cottage itself was destroyed by fire in the 1940s and the ruins bulldozed away, leaving only the gardens and pond.

Today the Dungeness Historic District encompasses historic structures associated with the Dungeness complex (CUIS-50.00) which contains at least twenty-nine historic structures, most of which date to the Carnegie-era (ca. 1880 to the early twentieth century). At least one structure, the Tabby House (CUIS-50.02), dates to the plantation

era beginning in the early nineteenth century. There are also three cemeteries included in the historic district. The Greene-Miller cemetery contains the remains of Catherine and some family members as well as some unidentified occupants buried after the Civil War. Another small burial plot located near Dungeness Dock contains two unmarked graves thought to be either the relatives of plantation owner Robert Stafford (Ehrenhard 1976:67), or the graves of two British sailors (Zeichner 1987:40). The Carnegie family also maintains a small private cemetery on the Main Road north of the mansion ruins, in the vicinity of the suspected 1827 slave cabins.



Chapter 5

Previous Archeological Work

EHRENHARD'S 1975 SURVEY OF CUMBERLAND ISLAND (SEAC ACC. 188, CUIS ACC. 253)

In the summer of 1975 the Southeast Archeological Center conducted a Cultural Resource Inventory of Cumberland Island. Survey methods consisted mainly of pedestrian survey and surface collection of most recorded sites but also included a limited number of excavations at Dungeness South (CUIS-5) as well as other sites. Dungeness South was reported by Ehrenhard (1976:46) to extend over a thousand meters along the intersection of the marsh and high ground. These site boundaries encompassed the Garden Point area to the southwest of the Dungeness ruins and extended across the high ground along Beach Creek to Beach Field. According to Ehrenhard (1976:120) "tests minimally consisted of a single 1.5 meter square and were excavated in arbitrary 15 centimeter levels when natural levels could not be identified". At least three test excavations were conducted at Dungeness South. Two excavation units, designated 30 N 5 E and 80 N 5 E, were dug near Beach Field to identify remnants of shell middens reported to have been there (Ehrenhard 2004, personal communication). Both units contained varying amounts of aboriginal ceramics, shell, animal bone, and charcoal. At least one more unit was opened between the Greene-era Tabby House and Dungeness Ruins to identify evidence of a garden wall that previously stood in the vicinity. Only a small amount prehistoric pottery was identified mixed with historic glass and metal fragments (Ehrenhard 1976:71). A concentration of shell was also identified at approximately 15 centimeters below the surface.

EHRENHARD'S 1981 ARCHEOLOGICAL INVESTIGATION AT DUNGENESS SOUTH AND DUNGENESS WHARF (SEAC ACC. 599, CUIS ACC. 359)

In July 1980, sub-surface testing was conducted at CUIS-5 (Dungeness South) and CUIS-6 (Dungeness Wharf). The investigative work focused on two areas of CUIS-5 known as Garden Point and Dungeness Crossing. Garden Point, which includes a historic trash dump, is a small peninsula of land to the southwest of the Dungeness Mansion. Dungeness Crossing is located to the east in an area of encroaching sanddunes. The project was undertaken due to the erosion of the sites and the impending loss of cultural resources and information. One of the project objectives at CUIS-5 included determining the extent of site leveling suffered by the prehistoric shell midden during the subsequent occupations of Nathanael Greene and the Carnegies (Ehrenhard 1981:1).

Garden Point had originally been designated as NPS 9 CAM 40, but was later incorporated by Ehrenhard into 9 CAM 5 (CUIS-5) (Ehrenhard 1981:24). A base map for Garden Point was prepared, followed by surface collection and auger testing. One hundred and ninety-five auger tests were dug to sterile soil and the resulting artifact data put on to the base map. The surface collections had indicated that the historic material was uniformly scattered across the site. A test unit placed in an area which appeared to be undisturbed, was excavated in two 30 cm levels, revealing prehistoric ceramics mixed with window glass, coal, and shell to a depth of 40 cm, followed by sterile sand (Ehrenhard 1981:24). A second test unit, placed in an area thought to be a portion of intact prehistoric shell midden, recovered a small amount of Deptford and Wilmington ceramics along with large amounts of oyster shell. A "radio-metric"

sample provided a date of 50 B.C. \pm 70 (Ehrenhard 1981:25). The results of the survey indicated that much of the Garden Point area was impacted by activities during the historic period in which Garden Point was subjected to landscaping, burning, plowing, and logging. The shell had also been mined for road fill, fertilizer for fields, and to make tabby. The historic midden materials had also been subject to artifact collecting over the years.

HORVATH'S 1995 INVESTIGATION FOR DUNGENESS SEPTIC SYSTEM (SEAC ACC. 1187, CUIS ACC. 459)

On June 13 and 14, 1995, SEAC archeologist Elizabeth Horvath and archeological technician Wendy Nettles conducted an archeological investigation near the Dungeness Laundry House prior to installation of two septic drain lines. Ten shovel/post hole tests were dug at five meter intervals along the two drain line routes. Tests were dug to approximately 150 cm using a shovel followed by another 50 cm with post hole diggers, the soil screened through ¼ inch mesh. Other than small numbers of cut and wire nails, glass fragments, and some burned fragments of whiteware recovered (but later discarded) from the disturbed upper soil layers, no cultural materials were found (Horvath 1995:1). Following the testing, the excavation of the drain line trenches by backhoe was monitored but no features or cultural materials were identified.

NICKEL'S 2003 GROUND-PENETRATING RADAR SURVEY AT THE DUNGENESS COMPLEX (SEAC ACC. 1846, CUIS ACC. UNASSIGNED)

In May 2003, Robert K. Nickel conducted a ground-penetrating radar (GPR) survey at the

Dungeness Historic District to identify prehistoric and historic architectural and archeological features in the upper garden of the Dungeness mansion ruins (CUIS-50.01). The survey focused on the terraced area of the upper garden located to the south and behind the Carnegie-era ruins. Two 40 x 60 meter, one 40 meter square, and two smaller survey grids were established in the survey area which is bounded on the north by a low masonry wall, ca. 1 meter high, and to the south by a taller masonry wall, ca. 2+ meters high. To the east, the survey area is bounded by the ruins of the Guest House and on the west by a walkway extending northeast to southwest from the Greene-era Tabby Cottage (Figure 6). It was suggested by Nickel (2003:20) that the high terrace wall and level lawn indicated that much of the GPR survey area was constructed of fill. With the exception of the large fountain in the middle of the grounds and some palm trees most of the surveyed area was in open grass.

The extensive open area of the upper garden allowed for the GPR survey of over 8000 square meters. The sandy soil and weather conditions at the time of the survey were good, and allowed for "excellent" soil penetration by the GPR unit (Nickel 2003:19). As a result, many features associated with the Carnegie-era were identified. These features included shell covered walkways, utility lines, a clay ball court, and an area thought to be the remains of an earlier fountain (Nickel 2003b:19). Although the GPR signal recorded features as deep as one meter, evidence of earlier occupations was not recognized due to the overlying fill, which had been used to terrace the upper garden (Nickel 2003:20). For areas of the Dungeness Historic District that are heavily forested and not readily accessible to GPR, it was recommended that SEAC use archeological survey techniques developed for those areas (i.e. shovel testing, etc.), for the identification of earlier sites (Nickel 2003:20–21).

-

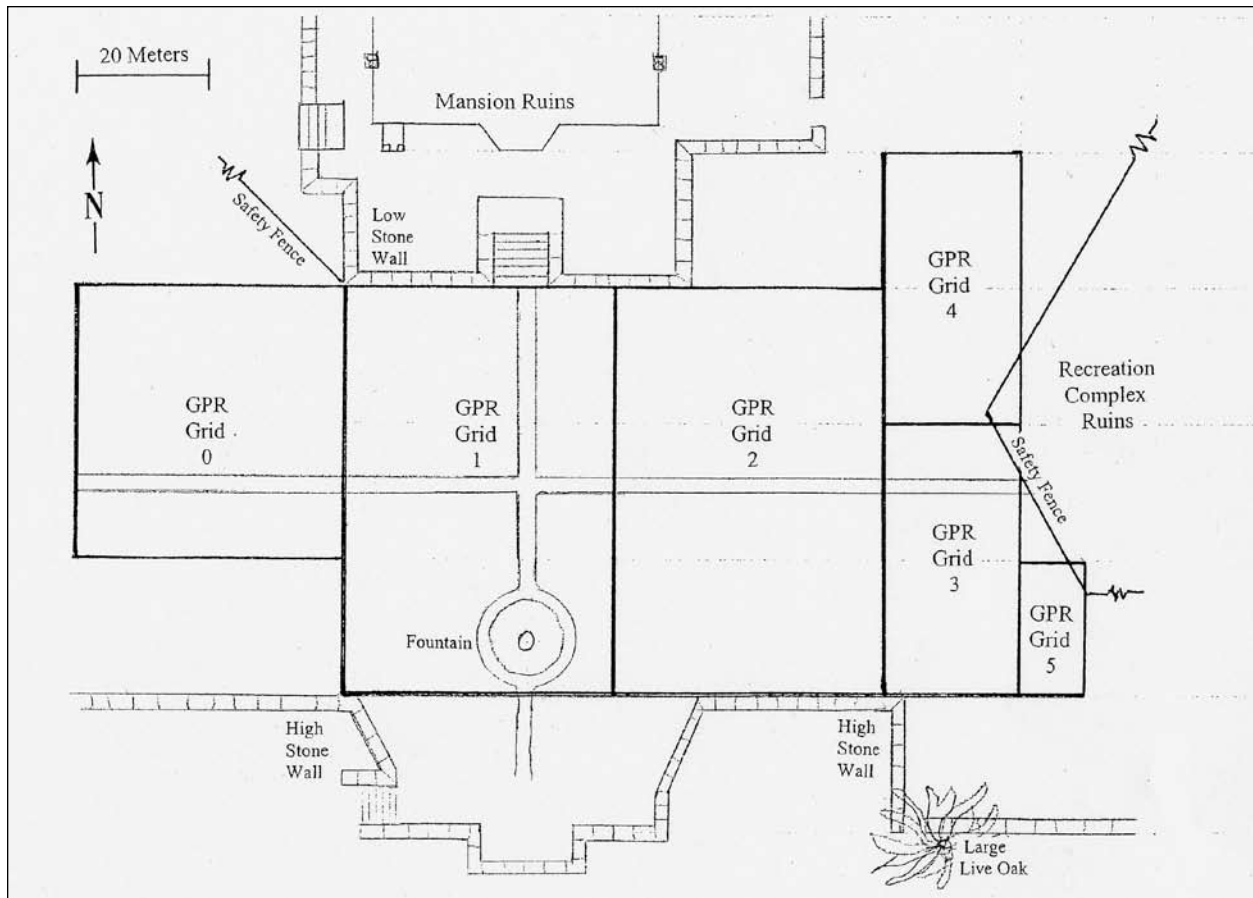


Figure 6. Dungeness upper garden area surveyed by Nickel (SEAC Acc. 1846).

Chapter 6

RASP 2004 Field Investigation Methods and Results

Three areas of the Dungeness Historic District were chosen for subsurface testing and given field site numbers 1902.01 (Dungeness Upper Garden), 1902.02 (Main Road), and 1902.03 (Duck Pond) (Figure 7). The Dungeness upper garden area surveyed by Nickel in 2003, was investigated to identify the nature of the fill used to terrace the upper garden, and to identify any possible remnants of prehistoric shell midden. The Main Road and Duck Pond locations were selected for survey based on historic maps which indicated the presence of historic structures believed to have existed during the plantation era.

A separate grid, established for each survey area, was used to place shovel tests and excavation units. Shovel tests were 50 centimeters in diameter and dug to sterile sand. Excavation units of 1 m² or larger were dug in arbitrary 10 centimeter levels. Vertical control was maintained in each excavation unit using a string and line level attached to the highest corner in each unit which served as the datum. All excavated soil was screened through ¼ inch hardware cloth and artifacts bagged according to shovel test location or excavation level. Artifacts collected from the same provenience were given a unique Field Specimen number and brought to the Southeast Archeological Center for cleaning and analysis.

DUNGENESS UPPER GARDEN (1902.01)

The survey of the upper garden area began May 4 with the establishment of a survey grid across the extant open lawn. The southeast corner of a smaller terraced garden attached to the mansion ruins, was designated 500E, 500N, and served as the permanent datum point for the grid (Figure 8). The 500E baseline, oriented perpendicular with the upper garden terrace wall (41° Mag. N),

extended south-southwest to the terrace wall which separates the upper and lower gardens. The grid extended east from the safety fence surrounding the ruins of the Recreation/Guest House, and to the west-northwest at 311° to a point just beyond the road leading from the Dungeness Tabby House to Garden Point.

Rather than begin the survey with shovel testing, three 1 x 2 meter excavation units were opened initially to identify any possible midden remains, and to provide a broader exposure of unit profiles to determine the depth of the fill and buried natural surface. Not knowing how deep the fill might be, it was also felt that the larger excavation units would be easier to dig at greater depths than standard 50 x 50 centimeter shovel tests. The three excavation units were placed in the center of the upper garden near the existing fountain and shell lined walkways where it was expected the overlying fill would not be as deep as that adjacent to the wall separating the upper and lower gardens. Each unit was excavated in 10 centimeter levels to a depth of 80 centimeters below datum (cmbd).

EXCAVATION UNIT 1 (480–482E, 462–463N)

EU 1 was excavated to a depth of 80 cm within a zone of sterile dark yellowish brown (10YR 4/4) sand devoid of shell and artifacts, with the exception of rodent burrows which contained shell and artifacts from upper layers. The upper levels of EU 1 revealed a zone of dark grey sand (10YR 3/1) and root mat mixed with historic material consisting of grey slate, coal, machine cut nails, glass fragments, and some shell fragments. In Level 2, at approximately 15 cmbd, a zone of crushed shell and large clumps of reddish to gray colored clay, possibly related to an old walkway, were identified (Figure 9). Below this zone was a layer of dark grayish brown (10YR 4/2) to very dark brown

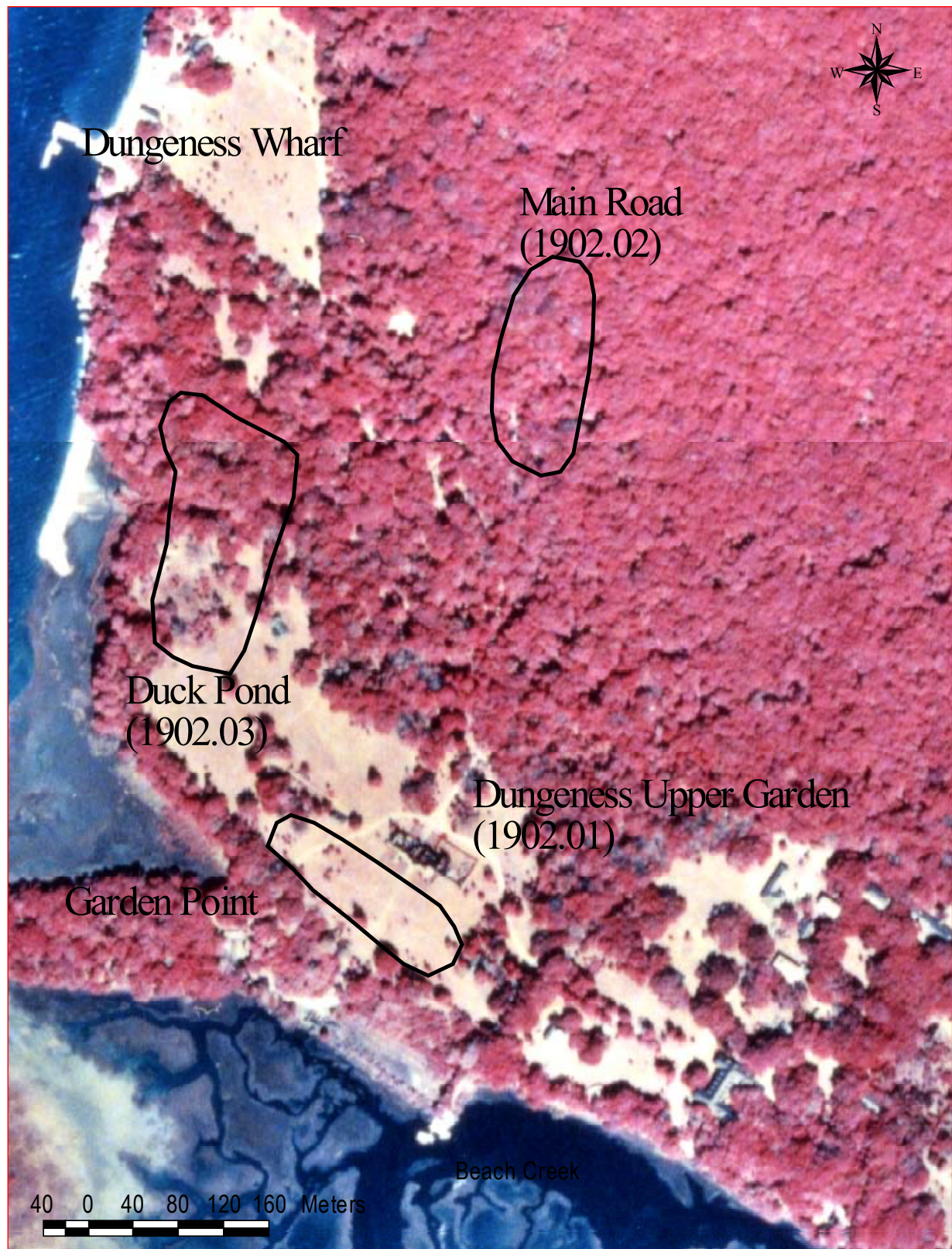


Figure 7. Dungeness survey locations (SEAC Acc. 1902).

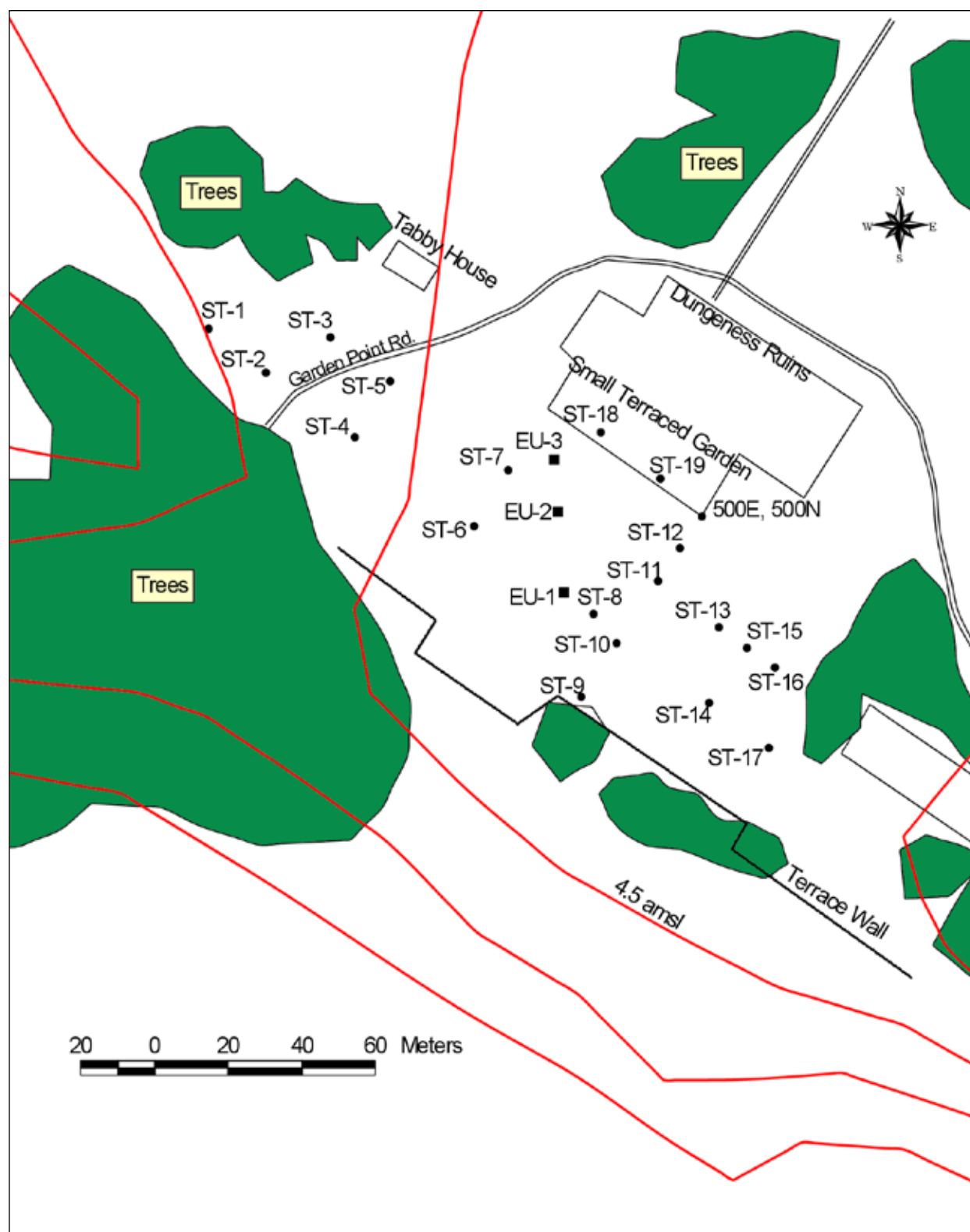


Figure 8. Dungeness upper garden (1902.01) shovel tests and excavation units. (The 4.5 meter contour line does not extend below the terrace wall into the lower garden which is about 1.5 amsl).



Figure 9. Excavation Unit 1 in Dungeness upper garden (1902.01).

(10YR 2/2) sand approximately 30 centimeters thick with a dense concentration of whole shell and shell fragments, vertebrate faunal remains, prehistoric ceramics and a lesser amount of historic material. Historic artifacts were present throughout the various levels of the shell and sand but tended to be concentrated in Levels 1–3, while, prehistoric artifacts (i.e. ceramics) tended to be concentrated in mid to lower levels (Table 2).

The prehistoric ceramics included sand tempered plain, sand tempered check stamped, simple stamped, and cord-marked sand and grit tempered wares (Table 3). A small number of Deptford, St. Johns, and Savannah period wares were identified among the assemblage, which date from the Woodland to Late Mississippian time periods. Two small fragments of what are identified as early historic period San Marcos Red-filmed ceramics were also recovered in Level 8 from a rodent burrow. With the exception of small samples, shell was not collected in these excavations. Most of the shell was oyster (*Crassostrea virginica*), with a smaller number of whelk (*Busycon* sp.) and clam (*Mercenaria* sp.) shell. Other faunal remains in-

cluded an assortment of fish, mammal, and reptile bone, which in most cases could not be identified by specific animal species.

EXCAVATION UNIT 2 (468–470E, 480–481N)

EU 2 was also excavated to a depth of 80 cmbd, to a zone of sterile brown (10YR 5/3) sand. The west half of upper levels of EU 2 were similar to EU 1. The soil below the root mat was dark grayish brown (10YR 4/2) to very dark grayish brown (10YR 3/2) sandy loam mixed with an assortment of historic debris—glass, gray slate, coal, pearlware and whiteware fragments, and a small amount of prehistoric ceramics. In Level 2 a feature running north-south across the unit was identified and designated Feature 1. This turned out to be a utility line trench for a water pipe encountered in Level 3 (Figure 10). The water pipe is lying at the top of the zone of very dark brown (10YR 2/2) loamy sand and shell with a mix of prehistoric and historic artifacts in the upper layers. On the east half of EU 2 a shallow pit feature was present through Level 2 (ca. 15 cmbd) (Figure 10). The fill

Table 2. Dungeness Upper Garden Excavation Unit 1 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 1	Zone A, LV 1	Bone, uid fragment	1	0.2
		Flat glass, colorless, solarized	1	0.7
		Nail, machine cut, fragments	2	3.3
		Slate, gray	1	11.5
	Zone A, LV 2	Container glass, colorless	1	1
		Creamware, burned	1	1.1
		Earthenware, glazed	1	1.1
		Jackfield ware	1	0.5
		Mortar	1	10.5
		Nail, machine cut	1	4.3
		Nail, machine cut, fragments	2	8.8
		Nail, uid, fragments	4	6.1
		Nail, wire	1	2.3
		Nail, wrought iron, fragment	1	5
		Plain, sand-tempered pottery	4	24.4
		Porcelain, blue glazed	1	0.6
		Savannah Check Stamped	1	4.2
		Savannah Fine Cord Marked	1	6.2
		Shark tooth	1	0.1
		Slate, gray	1	1.8
		Stoneware, glazed	1	4.6
		Uid-stamped, sand-tempered pottery	1	6.4
		Whiteware, Black-transfer print	1	0.7
	Zone B, LV 3	Bone, uid fragments	12	3.8
		Bone, uid vertebra	1	0.1
		Container glass, amber	1	6.3
		Container glass, colorless	2	0.9
		Mortar	1	1.3
		Nail, machine cut	1	2.2
		Nail, machine cut, fragments	3	11.9
		Pearlware, rim	1	1.2
		Plain, sand-tempered pottery	8	14.3
		Whiteware, rim	1	12.6
	Zone B, LV 4	Bone, uid fragments	4	2
		Plain, sand-tempered pottery	3	7.6
		Shell, clam	1	80.8
		Shell, whelk with possible extraction hole	1	80.3
		Uid-stamped, sand-tempered pottery	1	9.1
	Zone B, LV 5	Bone, uid fragments	16	6.6
		Glass fragment, colorless	1	0.2
		Nail, machine cut	1	10.9
		Plain, sand-tempered pottery	6	17.1
		Savannah Burnished Plain	1	13.9

Table 2 (continued). Dungeness Upper Garden Excavation Unit 1 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
		Savannah Fine Cord Marked	1	6.1
		Shell, whelk with possible extraction hole	1	67.2
	Zone B, LV 6	Bone, possible osteichthyes spine fragment	1	0.3
		Bone, uid fragments	6	2.7
		Bone, uid long bone, mammal	1	7.1
		Bone, uid turtle carapace	3	1.4
		Deptford Check Stamped	1	14.8
		Deptford Simple Stamped	2	7.8
		Iron concretion	1	10.9
		Plain, sand-tempered pottery, rim	1	4.3
		Plain, sand/grit-tempered pottery	1	4
		Saint Johns Plain	2	23.1
	Zone B, LV 7	Bone, osteichthyes bone fragments	2	0.2
		Bone, osteichthyes dorsal spine	1	0.2
		Bone, uid fragments	13	4.2
		Bone, uid mammal tooth	1	0.3
		Bone, uid turtle carapace	2	3.4
		Bone, uid vertebra	4	0.4
		Charcoal	1	0.2
		Plain, sand-tempered pottery	4	4.6
		Uid-cord-marked, sand-tempered pottery	1	2.9
		Uid-stamped, sand-tempered pottery	1	1.1
	Zone C, LV 8	Bone, uid fragment	1	1
		Red-filmed, sand-tempered pottery	2	2.9

Table 3. Prehistoric Ceramics Recovered from Excavation Unit 1, Dungeness Upper Garden.

Type Name	Zone A, LV 2	Zone B, LV 3	Zone B, LV 4	Zone B, LV 5	Zone B, LV 6	Zone B, LV 7	Zone C, LV 8
Deptford Check Stamped					1 (14.8 g)		
Deptford Simple Stamped					2 (7.8 g)		
Plain, sand and grit temper					1 (4.0 g)		
Plain, sand temper	4 (24.4 g)	8 (14.3 g)	3 (7.6 g)	6 (17.1 g)		4 (4.6 g)	
Plain, sand temper, rim					1 (4.3 g)		
Saint Johns Plain					2 (23.1 g)		
San Marcos Red							2 (2.9 g)
Savannah Burnished Plain				1 (13.9 g)			
Savannah Check Stamped	1 (4.2 g)						
Savannah Fine Cord Marked	1 (6.2 g)			1 (6.1 g)			
Uid Cord-marked, sand temper						1 (2.9 g)	
Uid Stamped, sand temper	1 (6.4 g)		1 (9.1 g)			1 (1.1 g)	



Figure 10. Excavation Unit 2 in Dungeness upper garden (1902.01).

was comprised of pale brown (10YR 6/3) sand, crushed shell and included numerous fossilized shark teeth, stingray spine fragments, and other fossilized fish teeth. The shallow pit is believed to have been formed by the removal of a small tree or shrub and then filled with soil obtained from a dredge spoil pile. The source of this fill was most likely dredge spoil piles located south of Garden Point where it is common practice to collect shark teeth from spoil dredged by the Army Corps of Engineers.

As with EU 1, there was a noticeable decrease in the amount of historic debris in the lower levels of EU 2, and an increase in the number of prehistoric artifacts—ceramics and faunal material (Table 4). Most of the prehistoric ceramics were sand-tempered plain wares, but also included examples of punctated, check-stamped, and other decorated wares (Table 5). Only a small number could be assigned to specific types such as Deptford, Savannah and St. Johns wares, which were similar to those recovered in EU 1. Faunal remains were comprised mainly of oyster shell, and a smaller amount of whelk, clam, and animal bone. Beneath the zone of dark brown sand and shell, the soil transitioned into a zone of sterile brown fine sand in Level 8.

EXCAVATION UNIT 3 (459–460E, 490–492N)

Excavation Unit 3 was placed ten meters away from the small terraced garden attached to the mansion. The stratigraphy in EU 3 was similar to EUs 1 and 2 although no modern features were identified in the upper levels. Level 1 was a grayish (10YR 5/1) sandy loam and root mat. Level 2 consisted mostly of light brownish gray sandy loam and root mat. Both levels were mixed with historic debris of brick, mortar, slate fragments, glass, ceramics, and pieces of ferrous metal (Table 6). The zone of dark gray (10YR 4/1) sandy soil and shell was encountered in Level 4 through 6. This zone of shell was much denser than in EUs 1 and 2 (Figure 11). The shell consisted mainly of whole and fragmented oyster but also included numerous examples of clam and busycan shell. The prehistoric ceramics were similar to those identified in EUs 1 and 2, although in lesser amounts (Table 7). Vertebrate faunal remains consisted of fish, reptile, and mammal bone, but examples were too small, or fragmented to identify specific species. The base of EU 3 was a zone of yellowish brown (10YR 5/6) sterile sand, disturbed by some rodent burrows.

Table 4. Dungeness Upper Garden Excavation Unit 2 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 2	Zone A, LV 1	Bone, sting ray spine fragments, fossilized	2	0.6
		Bone, terraodonitae grinding plate, fossilized	1	0.4
		Bone, uid fragments	3	0.5
		Bone, uid fragments, burned	3	4
		Brick fragments	6	2.5
		Coal	17	16.4
		Container glass, olive green	3	2
		Container glass, amber	1	0.7
		Drum teeth, fossilized	2	0.5
		Metal, uid fragment	1	0.3
		Shark teeth, fossilized	22	6.7
		Slag	1	4.2
		Slate, gray	1	0.2
	Zone A, LV 2	Bone, sting ray spine fragment, fossilized	1	0.5
		Charcoal	5	12.5
		Container glass, olive green	1	0.6
		Drum teeth	2	0.4
		Iron concretion	1	3
		Pearlware, handpainted	1	1.5
		Plain, sand-tempered pottery	1	1.1
		Plain, sand-tempered pottery	1	8.2
		Savannah Fine-Cord Marked	1	3.3
		Shark teeth, fossilized	17	5.7
		Shell, oyster	2	13.6
		Shell, uid fragments	3	3.7
		Shell, whelk	1	13.7
		Slate, gray	1	3.3
		Uid stamped, sand/grit-tempered pottery	1	6.8
		Whiteware	1	0.5
	Zone A, LV 3	Bone, uid fragments	13	6.2
		Bone, uid otolith	1	1
		Bone, uid, fragment	1	0.6
		Brick fragments	4	7.5
		Coal	5	5.9
		Deptford Check Stamped	2	18.7
		Flat glass, colorless	2	0.9
		Glass, fragment, blue	1	0.3
		Glass, fragment, patinated	1	5.4
		Metal, uid fragments	5	9.7
		Nail, machine cut, fragments	7	22.4
		Plain, sand-tempered pottery	4	7.1
		Plain, sand/grit-tempered pottery	2	2.1
		Savannah Burnish Plain	1	6.3

Table 4 (continued). Dungeness Upper Garden Excavation Unit 2 levels and associated artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 2	Zone A, LV 3	Shell, uid fragment	1	21.5
		Shell, uid fragments	4	3.2
		Shell, whelk	2	54.8
		Slate, gray	7	45.9
		St. Johns Plain	1	3.5
	Zone B, LV 4	Bone, uid fragments	7	7.2
		Brick fragments	3	6.2
		Deptford Complicated Stamped	2	23.6
		Plain, grog-tempered pottery	1	2.6
		Plain, sand-tempered pottery	13	38.7
		Shell, uid fragments	1	0.7
		Slate, gray	3	14.2
		St. John's Simple Stamped	1	4.3
		Terracota	2	7.2
		Uid check-stamped, sand-tempered pottery	2	4.7
		Uid Punctated, sand-tempered pottery, rim	1	3.8
		Uid-stamped, sand-tempered pottery	1	12.4
		Whiteware rim	1	2.4
	Zone B, LV 5	Bone, metacarpal or metatarsal	1	0.1
		Bone, osteichthyes dorsal spine	1	0.7
		Bone, osteichthyes pectoral spine	1	0.1
		Bone, uid fragments	74	19.4
		Bone, uid osteichthyes (bony fish, fragment	4	0.8
		Bone, uid turtle carapace	1	0.3
		Bone, uid turtle carapace	6	3.1
		Bone, uid vertebra	6	0.5
		Bone, uid, fragments	2	0.2
		Charcoal	50	4.8
		Check-stamped, sand-tempered pottery, rim	1	3.6
		Chert flake	1	0.1
		Container glass, olive green	1	0.4
		Cord-marked, sand-tempered pottery	1	3.1
		Deptford Check Stamped	7	20.8
		Drum tooth	1	0.1
		Glass fragment	1	0.4
		Metal, uid fragment	1	0.4
		Mortar	4	1.8
		Plain, grog temper	1	21.5
		Plain, sand-tempered pottery	83	109.5
		Plain, sand-tempered pottery, rims	4	10.2
		Plain, sand/grit-tempered pottery	3	68.4
		Savannah Burnished Plain	1	25.4
		Shell, uid	1	0.1
		Shell, uid	2	1.3
		Shell, uid fragments	7	5.6

Table 4 (continued). Dungeness Upper Garden Excavation Unit 2 levels and associated artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 2	Zone B, LV 5	Shell, whelk	2	124.1
		Slag	1	0.3
		Uid-complicated stamped, sand-tempered	1	9.3
		Uid-stamped, sand-tempered pottery	8	30.2
	Zone B, LV 6	Bone, uid	1	1.9
		Bone, uid fragments	20	6.5
		Bone, uid vertebra	3	0.2
		Charcoal	32	4
		Deptford Check Stamped	2	7.4
		Plain, sand-tempered pottery	18	45.4
		Plain, sand-tempered rims	2	3.5
		Shell (<i>Polinices duplicatus</i>)	1	16.7
		Shell, uid fragments	5	2.2
		Tooth, uid	1	0.2
		Uid-stamped, sand-tempered pottery	6	19.6
	Zone B, LV 7	Bone, uid fragments	22	2.9
		Bone, uid otolith	1	1.3
		Bone, uid vertebra	4	0.5
		Deptford Check Stamped	1	11.5
		Plain, sand-tempered pottery	13	18.1
		Plain, sand-tempered pottery, rim	1	5.3
		St. John's Plain	1	10.4
		Uid-stamped, sand-tempered pottery	2	37.1
	Zone C, LV 8	Bone, uid, fragments	10	1.8
		Charcoal	28	2.2
		Plain, grog-tempered pottery	1	1.7
		Plain, sand-tempered pottery	9	3.1

Table 5. Prehistoric Ceramics Recovered from Excavation Unit 2, Dungeness Upper Garden.

Type Name	Zone A, LV 2	Zone A, LV 3	Zone B, LV 4	Zone B, LV 5	Zone B, LV 6	Zone B, LV 7	Zone C, LV 8
Deptford Check Stamped		2 (18.7 g)		7 (20.8 g)	2 (7.4 g)	1 (11.5 g)	
Deptford Complicated Stamped			2 (23.6 g)				
Plain, grog temper			1 (2.6 g)	1 (21.5 g)			1 (1.7 g)
Plain, sand and grit temper		2 (2.1 g)		3 (68.4 g)			
Plain, sand temper	1 (1.1 g)	4 (7.1 g)	13 (38.7 g)	83 (109.5g)	18 (45.4 g)	13 (18.1 g)	9 (3.1 g)
Plain, sand temper, rim						1 (5.3 g)	
Plain, sand temper, rims				4 (10.2 g)	2 (3.5 g)		
Saint Johns Plain	1 (8.2 g)	1 (3.5 g)				1 (10.4 g)	
Saint Johns Simple Stamped			1 (4.3 g)				
Savannah Burnished Plain		1 (6.3 g)		1 (25.4 g)			
Savannah Fine Cord Marked	1 (3.3 g)						
Uid Check Stamped, sand temper				1 (3.6 g)			
Uid Check-stamped, sand temper			2 (4.7 g)				
Uid Complicated Stamped				1 (9.3 g)			
Uid Cord-marked, sand temper				1 (3.1 g)			
Uid Punctated, sand temper			1 (3.8 g)				
Uid Stamped, sand and grit temper	1 (6.8 g)						
Uid Stamped, sand temper			1 (12.4 g)	8 (30.2 g)	6 (19.6 g)	2 (37.1 g)	

Table 6. Dungeness Upper Garden Excavation Unit 3 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 3	Zone A, LV 1	Brick fragments	2	4.9
		Mortar	1	11
		St.Johns Plain	1	4.7
	Zone A, LV 2	Brick fragments	11	13.5
		Coal	13	12.5
		Container glass, light blue-green	1	0.9
		Container glass, olive green	1	1.4
		Container glass, colorless rim	1	1.7
		Glass fragment	1	1.3
		Glass, amber, fragment	1	0.6
		Granite	1	168.9
		Metal, uid, fragment	1	1.7
		Pearlware, blue, transfer print , rim	1	2.7
		Plain, grog-tempered pottery	1	5.8
		Slag	1	5.7
		Slate, gray	1	2.5
		Slate, red	4	7.8
		Uid-stamped, sand-tempered pottery	1	7.3
	Zone A, LV 3	Glass, colorless, fragment	1	1.6
		Pearlware, blue, transfer print	1	1.6
		Plain, sand-tempered pottery	2	5.4
		Shell, whelk with extraction hole	1	130
		Slate, red	6	82.2
	Zone B, LV 4	Shell, oyster	6	124.3
	Zone B, LV 5	Bone, uid fragment, burned	1	2
		Bone, uid fragments	3	2.4
		Bone, uid mammal	1	42.4
		Plain, sand-tempered pottery	5	28.8
		Savannah Fine Cord Marked	1	11.6
	Zone B, LV 6	Bone, aves longbone fragment	1	0.9
		Bone, longbone fragment	1	0.1
		Bone, osteichthtes dorsal spine	1	0.6
		Bone, turtle longbone fragment	1	1.9
		Bone, uid fragments	2	1.4
		Bone, uid fragments	43	23.1
		Bone, uid fragments, mammal	7	25.9
		Bone, uid jaw bone with intact tooth	1	5.2
		Bone, uid teeth	6	5.9
		Bone, uid turtle carapace fragment	1	0.1
		Bone, uid vertebra	5	1.5
		Plain, sand-tempered pottery	2	16.4
		Plain, sand-tempered pottery rim	1	19.4
		Shell, uid fragments	8	7.5

Table 6 (continued). Dungeness Upper Garden Excavation Unit 3 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
		Uld-stamped, sand-tempered pottery	1	9.3
	Zone B, LV 7	Bone, uid fragments	24	26.5
		Deptford Check Stamped	1	4.5
		Plain, sand-tempered pottery	2	4.6
		Tack, iron	1	1.1
	Zone C, LV 8	Bone, osteichthyes pectoral spine	1	0.2
		Bone, uid fragment	9	6.7
		Bone, uid vertebra	1	0.1
		Deptford Check Stamped	1	4.3
		Nail, machine cut nail	1	1.6
		Nail, wrought iron, fragments	1	3.2
		Plain, sand-tempered pottery	3	3
		Uld-stamped, grog-tempered pottery	1	4.1



Figure 11. Excavation Unit 3 in Dungeness upper garden (1902.01).

Table 7. Prehistoric Ceramics Recovered from Excavation Unit 3, Dungeness Upper Garden.

Type Name	Zone A, LV 1	Zone A, LV 2	Zone A, LV 3	Zone B, LV 5	Zone B, LV 6	Zone B, LV 7	Zone C, LV 8
Deptford Check Stamped						1 (4.5 g)	1 (4.3 g)
Plain, grog temper		1 (5.8 g)					
Plain, sand temper			2 (5.4 g)	5 (28.8 g)	2 (16.4 g)	2 (4.6 g)	3 (3 g)
Plain, sand temper, rim					1 (19.4 g)		
Saint Johns Plain	1 (4.7 g)						
Savannah Fine Cord Marked				1 (11.6 g)			
Uid Stamped, grog temper							1 (4.1 g)
Uid Stamped, sand temper		1 (7.3 g)			1 (9.3 g)		

SHOVEL TESTING

Following excavation, a small number of shovel tests (n=17) were conducted across the upper garden to identify the extent of the midden encountered in the three excavation units. Shovel testing revealed a zone (or zones) of dark brown loamy sand and shell extending as far south as the terrace wall, approximately 60 meters south of the small terraced garden (i.e. mansion ruins) and extending another 110 meters to the west-northwest near the road into Garden Point (Figure 8). Shovel testing between the 500E line and the ruins of the Carnegie Recreation/Guest House indicates that no intact midden is present in that area. Historic debris similar to that encountered in the excavation units also forms a light scatter in the upper levels of soil related to the occupation of the Greene-Miller- and Carnegie-era Dungeness mansions (Table 8).

Following testing on the upper garden lawn, two shovel tests (ST 18 and 19) were made in the small terraced area attached to the mansion ruins to inspect the nature of the fill used to create it. The area is about a meter higher than the terrace lawn and was formed by a fill of homogenous brown silty sand. Testing did not reveal any discernible stratigraphy like that encountered in the excavation units and the fill was mixed with glass, fragments of red clay brick, coal, nails, shell, and a small amount of prehistoric ceramics sherds (Table 8).

INTERPRETATION

When compared with the fill of the small terraced area, the upper garden terrace appears to consist of prehistoric shell midden deposits overlain by 20 to 30 centimeters of fill and modern debris. It is difficult to say with certainty, however, to what extent these resources are intact or possibly displaced by historic construction activities. Shell midden deposits are often influenced by many post-depositional transformation processes which can effect their structure and frequently makes interpreting them difficult. On the coast, shell middens are not only altered by tides and storms but are subject to erosion and weathering of shell caused by bioturbation (disturbances by plant roots and animal burrowing) and cultural activities, such as utilizing the shell for construction, agriculture, and commerce (Ceci 1984:64–65). Physical degradation of the shell midden takes place not only when the shell is removed for construction purposes, but it exposes the remaining portion to a host of destructive agents which further break down shell deposits and mixes them. In the case of the Dungeness midden, shell and associated artifacts at the surface would have become trampled and fragmented during construction of the mansion, a process that would allow the smaller pieces to be more easily transported downward through the naturally porous shell matrix (Kent 1988:9; Claassen 1998:86). The exposed shell midden surface at Dungeness would also have been disturbed by the plowing and planting associated with the establish-

Table 8. Dungeness Upper Garden Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 01	370E, 462N	Bone, uid fragments	4	1.4
		Charcoal	1	0.9
		Flat glass, colorless fragment	1	0.4
		Nail, uid fragments	2	2.4
		Plain, sand-tempered pottery	2	5.8
ST 02	390E, 462N	Bone, uid fragments	2	1.2
		Coal	4	8.3
		Granite	1	26.3
		Plain, sand-tempered pottery	1	2.8
		Uid Check-stamped, stand-tempered pottery	2	7.8
ST 03	390E, 480N	Bone, uid fragments	5	3.6
		Bone, uid tooth	1	1.6
		Coal	15	10.3
		Container glass, olive-green	2	2.5
		Deptford Cord Marked	4	58.4
		Glass, blue, shell-patteren	1	1.6
		Nail, uid fragment	1	4.6
		Plain, sand-tempered pottery	3	2
		Plain, sand/grog tempered pottery	1	3.8
ST 04	410E, 462N	Bone, aves longbone, fragments	4	4.7
		Bone, uid fragments	35	11
		Bone, uid long bone,	1	2.2
		Bone, uid tooth	1	0.4
		Bone, uid turtle carapace	2	1.6
		Bone, uid turtle, fragments	3	9.1
		Nail, wrought iron fragments	3	8.1
		Plain, fiber-tempered pottery	4	4.2
		Plain, sand-tempered pottery	13	20.3
		Plain, sand-tempered pottery rim and body	4	35.3
		Slate, red	1	4.8
ST 05	410E, 480N	Bone, uid fragment	1	0.3
		Brick fragments	6	10.4
		Coal	2	1.4
		Glass, colorless, fragment	1	0.9
		Glass, colorless, fragments	4	2.2
		Glass, patinated	1	8.6
		Limestone	1	4.9
		Nail, machine cut	1	8.5
		Nail, machine cut fragments	2	8.2
		Nail, uid fragment	1	1.4
		Pearlware, blue transfer print, rims	3	4.3
		Plain, fiber-tempered pottery	1	7.7
		Plain, sand-tempered pottery	9	31.8

Table 8 (continued). Dungeness Upper Garden Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 05	410E, 480N	Uld Check-stamped, sand-tempered pottery	1	2.2
ST 06	450E, 462N	Charcoal	1	2.8
		Bone, uid fragment	1	0.2
		Plain, sand-tempered pottery	3	8.6
		Uld-stamped, sand/grit-tempered pottery	1	8
ST 07	450E, 480N	Bone, uid fragments	6	3.8
		Container glass, olive green	1	2.2
		Container glass, olive-green	1	0.8
		Glass fragment	1	0.3
		Glass, colorless, fragment	1	0.3
		Granite	1	1.1
		Plain, sand-tempered pottery	4	6.8
		Plain, sand/grit-tempered pottery	1	2.1
		Uld Cord-marked, sand/grit-tempered pottery	1	4.4
ST 08	490E, 462N	Bone, uid fragments	3	3.1
		Coal	5	6.7
		Container glass, olive-green	1	0.9
		Plain, sand-tempered pottery	1	4.2
ST 09	500E, 440N	Deptford Linear Check Stamped	3	31.7
		Plain, grog-tempered pottery	1	2.3
		Plain, sand-tempered pottery	1	15.3
		Uld Cord-marked, grog-tempered pottery	1	2.5
ST 10	500E, 460N	Bone, uid bone fragments	12	5.4
		Brick fragments	6	9.3
		Granite	7	243.7
		Plain, grog-tempered pottery	4	7.1
		Plain, sand-tempered pottery	5	11.2
		Plain, sand-tempered pottery, rim	1	14.2
		Shell, oyster	1	10.2
		Shell, uid fragments	3	7.8
ST 11	500E, 480N	Bone, uid fragments	5	1
		Plain, sand-tempered pottery	3	9.5
		Slate, red	1	12.1
ST 12	500E, 490N	Bone, uid fragment	1	0.4
		Container glass, olive-green	1	0.6
		Glass, colorless fragment	1	0.3
		Nail, uid fragment	2	2.4
		Plain, sand-tempered pottery	5	14
		Shell, whelk	1	16.3
		Slate, gray	17	60.6
		Uld-stamped, sand-tempered pottery	1	0.8
ST 13	520E, 480N	Bone, uid fragment	1	0.3
		Brick fragment	1	1.2
		Plain, grog-tempered pottery	2	15.1
		Shell, whelk	1	9.6

Table 8 (continued). Dungeness Upper Garden Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 13	520E, 480N	Slate, gray	1	7.1
ST 14	530E, 462N	Bone, uid fragments	6	2
		Charcoal	2	2.9
		Glass, colorless fragment	1	2.4
		Plain, sand-tempered pottery	2	13.9
		St. Johns Check Stamped	1	2.5
ST 15	530E, 480N	Brick fragments	2	0.5
		Glass, light green-blue, fragment	1	0.4
		Nail, uid fragment	1	5.8
		Plain, sand-tempered pottery	2	3.5
		St. Johns Check Stamped	4	20.8
		Uid Cord-marked, sand-tempered pottery	1	1.5
ST 16	540E, 480N	Nail, uid fragments	2	6.9
		Plain, sand-tempered pottery	5	11.3
		Shell, oyster	1	10.6
		Slate, gray	2	1.8
		Uid-stamped, sand/grit-tempered pottery,	5	19.4
ST 17	550E, 462N	Bone, uid fragments	5	1.5
		Brick fragments	7	25.1
		Coal	1	1.9
		Nail, machine cut	1	1.4
		Nail, machine wire	1	1.1
		Plain, grog-tempered pottery	1	3.6
		Plain, sand-tempered pottery	6	19.9
		Staple, wire	1	1.2
ST 18	Westside	Brick fragments	20	86.9
		Coal	1	4.1
		Container glass, olive green	1	1.1
		Container glass, colorless	1	1.8
		Flat glass, colorless fragments	6	3
		Metal, uid fragments	3	13.3
		Mortar	4	10
		Nail, uid fragments	2	12.9
		Plain, sand-tempered pottery	1	6.4
		Slag	2	2.1
ST 19	Eastside	Creamware	1	1.5
		Metal, uid hardware	1	22.7
		Mortar	2	3.9
		Nail, uid fragments	3	6.2
		Pearlware, blue transfer-print	1	1.7
		Plain, sand-tempered pottery	1	1.1
		Plain, sand/grit-tempered pottery	1	7.6

ment of the gardens. The tree and plant roots would then have broken down individual shells further by penetrating shell crevices to fragment it while also increasing the acidity of the soil around the shell leading to additional breakdown of the shell (Kent 1988:10). The shell matrix is also altered by the burrowing and scavenging of animals such as earthworms, insects, and small mammals which churn the midden soil and carry artifacts from the surface to lower levels, along with organic matter which further increases soil acidity and chemical weathering of shell by exposing it to air and water. The result of all this would be to obliterate the more obvious signs of an intact midden or partially intact midden deposit making it difficult to differentiate between in situ remains and those that have been displaced by human activity.

Three basic types of shell midden deposits have been distinguished based on the degree to which they have been influenced by these cultural processes: primary, semi-primary, and secondary. Primary middens are intact shell deposits with little or no post-depositional alteration; semi-primary middens have displaced or missing sections; and secondary middens are comprised of shell totally displaced from their original context (Ceci 1984:69). Secondary middens can consist of substantial concentrations of shell, or be limited to “vague outlines or amorphous heaps” (Ceci 1984:69). With regards to the Dungeness midden, a large amount of shell was obviously removed for the construction of the first mansion but, as the recent excavations have indicated, a considerable amount of shell midden remains. It is difficult, however, to determine if these shell deposits represent a semi-primary site left in place, or whether they are secondary deposits of shell which were spread over the upper garden area intentionally to terrace it.

Typical characteristics of secondary middens include deposits which appear churned and homogenous, with a mix of shell, bone, and artifacts that are fragmented and dispersed. Associated skeletal elements or bivalves of shellfish are seldom articulated; and the cultural assemblage may appear impoverished due to removal of larger or more recognizable decorated objects (Ceci 1984:69). An example of a secondary midden is

the shell ring identified by Jerald Milanich at Table Point in 1970. Overall, the Table Point complex is composed mainly of scattered shell piles but also includes a large shell ring constructed of shell and dirt. The ring has a base varying between 20 and 25 feet wide, with deposits 0.7 to 2.0 feet thick which form a rough circle with a diameter of 220 feet, surrounding a central midden measuring 150 x 60 feet (Milanich 1971a:49). The ring had large gaps 20 to 30 feet wide where shell had been removed for road fill sometime in the nineteenth and twentieth centuries. The composition of the ring was described as:

a mixture of shell, mostly oyster, and grey humus. Density of the shell in the humic matrix was much less than in shell middens at the site. The shell was not lensed in the ring as it was in portions of the middens, and in appearance the fill was quite different from shell middens. No living floors were evident and no charcoal lenses were present. The shells and pieces of food bone and sherds tended to be more broken than in the middens. Together these facts suggest that the ring was constructed by using old midden shell and humus as building material rather than being in-place-deposited shell midden as from a circular village.
(Milanich 1971a:49–51)

In contrast to the shell ring, tests in the central midden at Table Point indicated it was composed of in-place deposits rather than re-deposited shell (Milanich 1971a:58). The shell midden was composed of dense shell and dark brown humus with visible lensing, and an overlying humic zone of mottled, grey and brown sand on top of a zone of sterile buff sand (Milanich 1971a:58–59). The number of ceramic sherds recovered from the central midden was not high, but many pieces were apparently from the same vessel and recovered from the same location, suggesting they were still in situ.

When compared with the findings from Table Point shell ring, certain aspects of the Dungeness shell midden suggest it may be a secondary deposit. Other investigations, however, indicate, they may be relatively intact, although severely disturbed

by historic period activities in some areas. In 1970, several shell middens were investigated on Amelia Island, Florida (Hemmings and Deagan 1973). The Harrison Homestead and Walker Point mound and village site are located on the western edge of Amelia Island overlooking tidal creeks and marsh. Both sites had been impacted to varying degrees by activities in the historic period such as agriculture and shell mining for road fill. At the Harrison Homestead site, a shell midden attributed to the early historic Indian settlement of Santa Maria was identified. The midden was composed of “densely packed oyster shell, lesser amounts of other molluscs, and dark, sandy ‘midden soil’ with “a maximum thickness of 1.6 feet” (Hemmings and Deagan 1973:7). Much of the shell midden had been disturbed by plowing, but also included zones of undisturbed midden containing large unbroken oyster valves, overlying fine-grained yellow or tan sand (Hemmings and Deagan 1973:7). The Walker Point mound and village site, which was identified with the St. Johns I and II periods (ca. A.D. 700–1200) includes a small burial mound and shell middens (Hemmings and Deagan 1973:30). The shell midden deposits consisted of densely packed oyster valves, and other molluscs, small bones, and midden soil which did not exceed 2 feet in depth (Hemmings and Deagan 1973:33). Although inferred stratigraphy based on ceramic types was not readily apparent in the shell zone, nor were there observable lenses of other types of soil, floors, or other features, it was believed (Hemmings and Deagan 1973:33) the shell zone represented a “continuous deposition” resting on an undulating surface of Holocene sand (Hemmings and Deagan 1973:33).

The shell deposits identified at Dungeness upper garden share several characteristics of the middens described at Table Point, Harrison Homestead, and Walker Point. Milanich’s description of the Table Point shell ring and central midden suggests the midden remains at the Dungeness upper garden may be displaced remnants of a shell midden which were spread over the upper garden area. This is more evident in EUs 1 and 2 where the concentration of shell was not as dense as that in EU 3. And, although there appears to be some

stratification of the historic and prehistoric artifacts (Table 9), the assemblage of diagnostic pieces, particularly prehistoric ceramics, is relatively small and disparate with no conjoinable pieces that would indicate that they were in situ. On the other hand, the small ceramic sherds and pieces of bone may actually represent fragments which have percolated downward as a result of bioturbation into the base level of the midden after removal of the top portion during the historic period. Although there is also no apparent lensing which would suggest a gradual deposition over time, this may also be a result of bioturbation as well. Within each unit, the zone of shell and dark midden soil is resting on a relatively uneven surface of sterile yellowish brown sand which would indicate that the shell deposit remains in situ. The evidence indicates, particularly in EU 3, that at least some areas of intact midden are present. Other areas, may in fact represent remains of the midden that were dispersed from the original mound, or midden context, although more extensive and intensive excavation and analysis would be needed to offer more conclusive proof that the remains are in fact what could be called “semi-primary” deposits.

MAIN ROAD (1902.02)

The second phase of the survey began May 10 along the Main Road north of the Dungeness Ruins in an area suspected to be the site of early nineteenth century structures. The survey area is located approximately 40 meters north of the intersection of Coleman Avenue and the Main Road in the vicinity of the Carnegie family cemetery which is surrounded by a chain link fence on the west side of the Main Road. Compared with the area within the Carnegie fence, the understory in the survey area on the east side of the road is relatively open and free of saw palmetto thicket. The reason given by park personnel for the difference between the interior of the fence and immediately outside is attributed to foraging by wild pigs which has destroyed the underbrush. It also seems reasonable to postulate that the foraging by wild pigs has

**Table 9. Distribution of Historic and Prehistoric Ceramics by Level Within EU1, EU2, and EU3, Dunge-
ness Upper Garden.**

EU 1						
Zone A, LV 2	Savannah Check Stamped	Savannah Fine Cord Marked	Jakefield ware	Creamware	Porcelain	Stoneware
Zone B, LV 3					Pearlware	Whiteware
Zone B, LV 4						
Zone B, LV 5	Savannah Burnished Plain	Savannah Fine Cord Marked				
Zone B, LV 6	Deptford Check Stamped	Deptford Simple Stamped	Saint Johns Plain			

EU 2					
Zone A, LV 2		Saint Johns Plain	Savannah Fine Cord Marked	Pearlware	Whiteware
Zone A, LV 3	Deptford Check Stamped	Saint Johns Plain	Savannah Burnished Plain		
Zone B, LV 4	Deptford Complicated Stamped	Saint Johns Simple Stamped			
Zone B, LV 5	Deptford Check Stamped		Savannah Burnished Plain		
Zone B, LV 6	Deptford Check Stamped				

EU 3			
Zone A, LV 2		Pearlware	
Zone A, LV 3		Pearlware	
Zone B, LV 4			
Zone B, LV 5	Savannah Fine Cord Marked		
Zone B, LV 6			

Table 9 (continued). Distribution of Historic and Prehistoric Ceramics by Level Within EU1, EU2, and EU3, Dungeness Upper Garden.

EU 1			EU 2			EU 3		
Zone B, LV 7			Zone B, LV 7	Deptford Check Stamped	Saint Johns Plain	Zone B, LV 7	Deptford Check Stamped	
Zone C, LV 8		San Marcos Red	Zone C, LV 8			Zone C, LV 8	Deptford Check Stamped	

helped maintain an area that was already cleared of saw palmetto.

Prior to establishment of a survey grid in this locality, a pedestrian survey of the road side was made. Several scatters of loose brick fragments and mortar were identified on the east side of the road, with at least two of the scatters being associated with small, almost imperceptible, mounds, or rises (Figure 12). The scatters, five in all, were oriented in a rough line approximately 10 meters east of the road. Believing these scatters to be remains of the structures indicated on the 1827 map, a grid was established for the survey area using the southeast corner of the chain link fence surrounding the Carnegie family cemetery as a reference point. The datum—designated 500E, 500N—was placed 20 meters due south of the fence corner, with the grid oriented parallel to the east side of the cemetery fence at 15° (Mag. N) (Figure 12). Three shovel testing transects were then established along the 525E, 535E, and 545E grid lines running parallel with the road extending from 450N to 630N along the 525E line, and from 470N to 550N and 560N on the 535E and 545E lines respectively.

A small number of tests were also dug on the west side of the road where the historic map indicated another row of five structures had existed as well. Testing was limited to north of the cemetery

fence which encloses much of the area believed to be the general location of the cabins on the west of the road. The survey crew was permitted access to the cemetery grounds to identify any possible brick and mortar scatters but none were identified within the fence, although this may have been due to the dense underbrush within the fence. Outside the fence where the ground is more open, a brick and mortar scatter and small mound were identified approximately 25 meters north of the northeast corner of the cemetery fence.

Shovel tests were dug at 10 meter intervals along each transect and each test was dug to sterile brown sand, which was generally encountered at 50 to 60 centimeters below the ground surface. Soil was screened through ¼ inch hardware cloth. Testing revealed a broad but light scatter of historic artifacts from 450N to 630N with the greatest concentration being on the 525E line in the vicinity of brick and mortar piles located between 470N and 500N (Table 10). One shovel test at 525E, 480N revealed a large amount of shell, animal bone, and historic artifacts that was attributed to a historic midden. The seven shovel tests dug north of the cemetery fence on the west side of the road on the 480E and 490E lines also revealed a light scatter of historic artifacts. One shovel test was placed next to the brick and mortar scatter and small mound

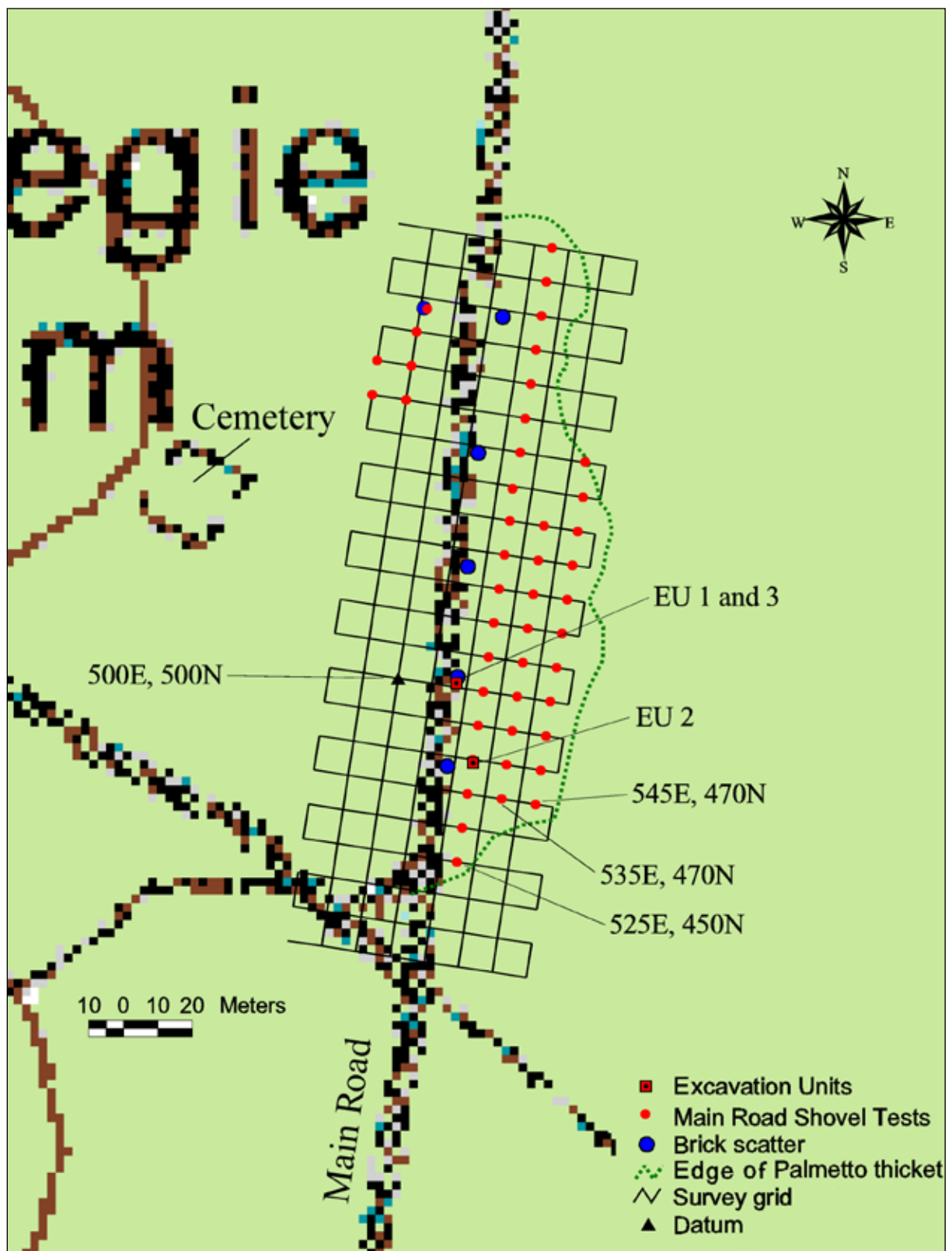


Figure 12. Main Road (1902.02) shovel tests and excavation units.

Table 10. Main Road Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 01	525E, 450N	Container glass, colorless	1	3.1
		Creamware	2	2.3
		Nail, uid fragments	3	6.5
		Nail, wrought iron, fragments	2	11.3
ST 02	525E, 460N	Brick fragment	1	2.6
		Container glass, olive green	1	1.2
		Metal, uid fragment	1	0.5
		Mortar	2	8.9
		Pearlware, blue transfer print	1	0.3
ST 04	525E, 480N	Bone, possible bear phalange	1	10.9
		Bone, uid fragment, burned	1	0.8
		Bone, uid fragments	9	8.2
		Bone, uid tooth	1	4.5
		Brass buckle	1	8.2
		Brick fragments	7	15.1
		Clay pipe bowl and stem fragment	1	4.3
		Container glass, olive green	4	13.6
		Container glass, light green	1	0.2
		Creamware	7	21.9
		Creamware, handpainted	1	0.3
		Earthenware, glazed, rim	1	12.9
		Earthenware, unglazed	4	11.7
		Glass, light green	3	0.4
		Iron hoe blade fragment	1	337.9
		Metal, uid object	1	26.3
		Mortar	1	44.1
		Nail, machinecut, brass	1	2.6
		Nail, uid fragments	16	23.4
		Nails, machine cut	10	55.1
		Pearlware	1	2.6
		Pearlware base	1	3.7
		Pearlware, blue shell-edged rim	1	3.9
		Porcelain, blue transferprint	1	0.6
		Slate, gray	1	0.7
		Stoneware, salt-glazed	2	39.4
		Uid fish scales	57	0.7
ST 05	525E, 490N	Mortar	3	111.6
ST 06	525E, 500N	Brick fragment	1	13.1
		Container glass, colorless	1	0.3
ST 07	525E, 510N	Brick fragment	1	3.8
		Container glass, olive green	3	14.3
		Container glass, light olive green	1	0.6
		Creamware rim	1	6

Table 10 (continued). Main Road Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 07	525E, 510N	Glass, colorless, fragment, burned	1	2.9
		Metal, uid fragment	1	0.9
		Nails, machine cut	2	13
ST 08	525E, 520N	Container glass, olive green	1	6.3
ST 09	525E, 530N	Earthenware, glazed	1	11.9
		Fulgurite	1	0.3
		Mortar	1	54.3
ST 10	525E, 542N	Container glass, olive green	2	19.8
		Nail, wrought iron fragment	1	1.7
ST 11	525E, 550N	Metal, uid hardware	1	126.8
		Mortar	1	27.4
		Nail, uid fragments	4	14.6
ST 12	525E, 560N	Container glass, light green	1	0.3
		Stoneware, salt-glazed	1	0.6
ST 13	525E, 570N	Creamware	1	0.8
		Earthenware, glazed, rim	1	3.5
		Metal, uid fragment	1	3.4
		Mortar	2	7.1
ST 14	525E, 580N	Nail, uid fragment	5	4.9
		Nail, wrought iron fragment	1	5.8
		Pearlware, blue transfer-print	1	0.9
ST 15	525E, 590N	Nail, machine cut	1	7
		Nail, uid fragments	14	17.5
		Pearlware, blue shell-edged, rim	1	2.3
ST 17	525E, 610N	Container glass, olive green	5	13.9
		Shell, clam	1	37.2
ST 19	525E, 630N	Container glass, olive green	1	0.3
		Mortar	1	10.6
ST 20	535E, 470N	Container glass, dark olive green	1	3.7
ST 22	535E, 490N	Glass, colorless fragment	1	0.2
ST 25	535E, 520N	Pearlware, green shell-edged, rim	1	3.9
ST 26	535E, 530N	Bone, uid fragment, burned	1	0.9
		Container glass, olive green	1	1.3
		Creamware	1	1.5
ST 27	535E, 540N	Container glass, olive green	1	0.6
		Glass, colorless fragment	1	1
		Porcelain	1	0.3
	535E, 540N	Metal, uid fragments	2	3.2
ST 28	535E, 550N	Brick fragment	1	46.9
		Container glass, olive green	1	2.1
		Metal, uid fragment	1	0.8
		Pearlware base	1	16.7
ST 29	545E, 470N	Flat glass, clear	2	1.4
		Flat glass, light blue/green	4	5.3
ST 30	545E, 480N	Chert flake	1	0.1

Table 10 (continued). Main Road Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 30	545E, 480N	Container glass, olive green	1	0.3
		Earthenware, blue transfer-print	1	0.6
		Nail, uid fragments	5	8.6
		Shell, uid fragment	1	1.1
		Tack, brass	1	0.6
ST 31	545E, 490N	Brick fragments	5	50.5
		Metal, uid fragments	3	1.2
ST 32	545E, 500N	Bone, uid fragment, burned	1	2.5
		Bone, uid tooth fragments	2	1.4
		Container glass, olive green	1	1.1
		Creamware	1	0.9
		Creamware rim	1	0.3
		Metal, uid fragments	3	2.7
		Nail, uid fragment	1	0.6
ST 33	545E, 510N	Annulareware	1	1.4
		Brick fragments	2	40.7
		Container glass, olive green	3	5.4
		Creamware base	1	9.1
		Mortar	1	6.1
		Nail, uid fragments	4	5.2
		Nail, wrought iron, fragment	1	12.8
		Pearlware	1	2.1
		Pearlware, blue shell-edged, rim	1	9.4
ST 34	545E, 520N	Brick fragment	1	7.3
		Metal, uid fragments	6	8.6
		Pearlware, hand-painted	1	2
ST 35	545E, 530N	Container glass, olive green	1	0.6
		Nail, uid fragments	6	7.1
		Pearlware, green shell-edged, rim	1	3
ST 36	545E, 540N	Annularware	2	3.1
		Brick fragments	2	51.1
		Creamware	1	0.4
		Creamware, banded, rim	1	0.6
		Creamware, hand-painted	1	0.5
ST 37	545E, 550N	Pearlware	1	2.5
ST 38	545E, 560N	Creamware	1	1.5
		Earthenware, glazed	1	2.7
		Metal, uid fragment	1	11.9
		Pearlware, green shell-edged , rim and body	3	6.8
ST 39	545E, 570N	Annulareware	1	1.9
		Bone, mandible with intact tooth, uid mammal	1	3.2
		Bone,uid fragment	1	0.9
		Container glass, olive green	1	1.7
		Creamware	2	0.5
		Creamware base	1	1.7

Table 10 (continued). Main Road Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 39	545E, 570N	Earthenware, glazed	1	3.2
		Flat glass, light green/blue	1	0.7
		Nail, machine cut	1	8.9
		Pearlware	1	2.6
		Pearlware, blue transfer print	1	0.6
		Pearlware, decorated	1	3.7
		Pearlware, transfer print	1	1.4
		Shell, clam	1	26.6
ST 40	480E, 581N	Pearlware, blue transfer print	1	0.2
ST 42	480E, 600N	Bone, uid turtle	4	22.7
ST 43	490E, 580N	Container glass, olive green	1	0.6
		Metal, uid fragments	2	7.3
		Nail, machine cut, fragment	1	2.4
ST 45	490E, 590N	Brick fragments	6	320.1
		Container glass, light blue/green	1	1.3
		Earthenware, glazed, rim with leaf print	1	2.6
ST 46	492E, 607N	Brick fragments	2	86.5
		Metal, uid fragments	1	58.7
		Mortar	2	299.3
		Nail, uid fragments	5	14.6
		Nails, machine cut	5	43.8

(492E, 607N). This test revealed the upper level of the mound was composed of very dark humic loamy sand mixed with large pieces of mortar with a smaller amount of fragmented red clay brick, and cut nails.

Following the shovel testing, two 1 x 1 meter excavation units were then placed near the greatest concentration of artifacts. EU 1 (517–518E, 501–502N) was placed along the edge of a small mound of brick and mortar fragments. EU 2 (525–526E, 479–480N) was placed in the location of the previously identified historic midden at ST-525E, 480N. The backfilled shovel test was incorporated into the northwest corner of EU 2. Eventually a third excavation unit was opened adjacent to EU 1. This unit was designated EU 3 (518–519E, 501–502N).

EXCAVATION UNITS 1 (517–518E, 501–502N) AND 3 (518–519E, 501–502N)

EU 1 intersected the southeastern edge of one of the small mounds composed of mortar, or tabby

fragments with lesser amounts of red clay brick mixed within a zone of very dark gray (10YR 3/1) loamy sand. Below this was a zone of grayish brown (10YR 5/2) loamy sand. Beneath these zones the soil transitions into sterile gray (10YR 6/1) to almost white sand. Beneath this gray sand there is a very distinct transition to a dark yellowish brown (10YR 4/4) sand at 84 cmbd. An area of fragmented tabby, identified as Feature 2, (Feature 1 was assigned to the midden in EU 2) was encountered in Level 2 and extended to the base of Level 4 (Figure 13). Beneath this feature, a post hole (Feature 3) was identified and excavated to a depth of ca. 80 cmbd, although the post hole extended an unknown depth into the dark brown sterile sand. The stratigraphy of EU 3 was similar to EU 1 although without the large amount of brick and mortar present in EU 1.

A large number of historic artifacts were also recovered from EU 1 and 3. With the exception of a small sample, most of the tabby and brick identified during excavation was not collected. The sample consisted of large pieces of what appears to be lime



Figure 13. Excavation Unit 1 and Feature 2. Large fragment of cast iron cooking vessel is protruding from NE corner of the unit.

mortar although it doesn't appear to have been used to bond brick together, but appeared more as a form of daub based on the impressions of wood planks and poles observed in the fragments and by the thickness of the pieces. A small fragment of coquina was also recovered during the excavation. Other architectural materials included numerous whole nails and nail fragments. The majority of them appear to be machine cut nails although most are badly corroded and identification of distinct diagnostic traits is not possible until the nails are cleaned of corrosion and treated. The remainder of the artifact assemblage consisted of large amounts of vessel glass and ceramics, but also included a large section of a cast iron skillet or pan and more personal items (Tables 11 and 12).

EXCAVATION UNIT 2 (525–526E, 479–480N)

EU 2 was placed next to ST-4 (525E, 480N) where the historic midden was encountered. Here,

beneath a sparse humic zone of leaves and roots, the upper soils consists of gray (10YR 5/1) to dark gray (10YR 4/1) sand mixed with large amounts of oyster shell and historic artifacts to a depth of approximately 30 cmbd. At the base of Level 4, the midden, designated Feature 1, becomes more apparent as the surrounding zone of sandy soil becomes lighter gray mottled with patches of white sand (Figure 14). The midden, which narrows with depth into the NW corner of the unit is distinguished by darker grayish sand (now mottled by the previous shovel test). Within the remainder of the unit the sandy soil becomes increasingly light gray and white sand before encountering the zone of dark yellowish brown sand at 60 cmbd. It appears as if the midden was initially a shallow pit, which eventually overflowed as it was filled and formed a broad scatter of refuse in the upper levels. Based on the position of the feature in EU 2, the midden appears to extend to the northwest to about 524E, 490 N.

Table 11. Main Road EU 1 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 1	FEAT 2	Bone, uid fragments	2	2
		Bone, uid tooth fragment	1	1.6
		Brick fragments	2	2.4
		Container glass, olive green	1	2.1
		Creamware, decorated	1	0.5
		Glass, colorless fragment	1	0.1
		Metal, uid fragments	4	2.4
		Mortar	1	1.8
		Nail, uid fragments	5	21.4
		Nail, wrought iron, fragments	4	21.9
		Stoneware, glazed, burned	1	12.2
		Uid fish scales	3	0.1
	FEAT 2, LV 1	Nail, uid fragments	2	12
	FEAT 2, LV 2	Nail, uid fragment	1	7.8
	FEAT 2, LV 3	Glass fragments	2	1.3
		Metal object, possible sail and packing needle	1	12.6
		Stoneware, glazed	1	4.3
	FEAT 2, LV 5	Nail, uid fragment	1	0.7
	LV 1	Bone, uid fragment	1	1.6
		Button, brass	1	2
		Container glass, colorless	1	10
		Container glass, olive green	1	0.5
		Metal, uid fragments	5	8.9
		Mortar	3	433.3
		Nail, machine cut	1	4.6
		Nail, uid fragments	62	157.9
		Nail, wrought iron fragments	18	67.5
		Pearlware, blue transfer-print	1	0.8
	LV 2	Annularware, rim	1	2.1
		Bone, uid aves	1	0.2
		Bone, uid aves, fragment	3	3.3
		Bone, uid fish	1	0.1
		Bone, uid fish vertebra	2	0.2
		Bone, uid fragments	12	3.2
		Bone, uid frog	4	0.4
		Bone, uid mammal rib fragment	2	2.3
		Bone, uid turtle, fragments	3	6.7
		Brick fragments	4	18.8
		Container glass, olive green	2	9.4
		Creamware	2	2.5
		Glass fragments	2	1.4
		Glass fragments	3	10.4
		Glass, aqua, fragment	1	0.4

Table 11 (continued). Main Road EU 1 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 1	LV 2	Metal, uid fragments	20	119.3
		Metal, uid hardware	1	73.6
		Nail, uid fragments	2	7.3
		Nail, uid fragments	79	214.6
		Nail, wrought iron, fragments	11	45.9
		Nails, machine cut	8	84
		Pearlware	1	2.7
		Pearlware, green shell-edged, rim	1	2.3
		Plant seed	1	0.1
		Uid fish scales	4	0.1
	LV 3	Bone, uid bones	2	0.4
		Bone, uid fish vertebra	4	0.4
		Bone, uid fragments	16	4.4
		Bone, uid, burned	1	0.7
		Brass, uid	1	1.3
		Brick fragments	2	1.2
		Clay pipe stem	1	2.3
		Container glass, olive green	2	1
		Creamware base	1	4.5
		Earthenware, glazed -burned	1	2.3
		Earthenware, glazed w/ blue band, burned	1	0.7
		Fish scales	13	0.2
		Glass, green, fragments	4	6.1
		Metal buckle	1	10.8
		Metal, uid fragments	12	18.4
		Mochaware	1	0.8
		Nail, brass	1	1.8
		Nail, machine cut fragment, clinched	1	2.3
		Nail, uid fragments	23	59.6
		Nail, wrought iron fragments	1	12.5
		Nails, machine cut	6	40.8
		Pearlware, blue-glazed	1	0.6
		Pearlware, burned	1	0.4
		Porcelain, gold-rimmed	1	4.2
		Stoneware	1	1.7
		Stoneware, unglazed	1	7.5
		Whiteware	1	2
	LV 4	Barnacle	2	0.6
		Bone, uid fragments	6	0.7
		Bone, uid vertebra	2	0.3
		Container glass, olive green	1	0.9
		Creamware	1	0.5
		Earthenware, burned	5	13.8
		Glass fragments	7	25.7
		Lead fragment	1	9.8

Table 11 (continued). Main Road EU 1 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 1	LV 4	Nail, machine cut fragments	6	20.9
		Nail, uid fragments	27	41.2
		Nail, wrought iron, fragments	2	14.9
		Shell, clam	2	38.1
		Stoneware, glazed	5	9.1
		Uid fish scales	4	0
	LV 5	Brick fragments	4	5.3
		Mortar	4	3.1
		Nail, uid fragments	5	6
		Nail, wrought iron	1	8.6
		Pearlware base	1	5
		Pearlware, burned	1	1.2
		Stoneware	1	9.7
		Stoneware, glazed, burned	1	13.1
		Stoneware, unglazed	1	1.1
	LV 6	Brick fragment	1	1.9
		Mortar	1	0.8
		Nail, uid fragments	2	2
		Nail, wrought iron fragment	1	5.5
	NE Corner Fill	Bone, uid fragment	1	0.1
		Nail, uid fragment	1	7.2
	Sample	Mortar sample	8	3295.6

Table 12. Main Road EU 3 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 3	LV 1	Bone, uid fragments	2	1.1
		Container glass, olive green	1	0.5
		Creamware	1	1.1
		Nail, uid fragments	20	40
		Nail, wrought iron, fragments	4	27.2
	LV 2	Annular ware rim and body	3	2.4
		Annularware rim and body	4	3.8
		Bone, aves long bone fragments	2	8.8
		Bone, uid fragments	5	10.7
		Container glass, olive green	11	5.8
		Creamware	5	2.8
		Creamware base	2	9.6
		Earthenware, glazed	1	8.5
		Glass fragments	2	4.4
		Glass, aqua fragment	1	1.3
		glass, colorless fragments	3	2.7
		Metal vessel fragment	1	267.8
		Metal, uid fragments	21	17.3
		Metal, uid hardware	1	9.9
		Metal, uid iron strap	1	25.5
		Nail, machine cut, fragments	2	8.4
		Nail, uid fragments	83	194.8
		Nail, wrought iron, fragments	11	44.4
		Nails, machine cut	7	40.1
		Pearlware	4	8.5
		Pearlware, blue hand painted, rim and body	4	2.6
		Pearlware, blue shell-edged, rim	1	5
		Pearlware, blue transfer-print	5	6.9
		Pearlware, blue transfer-print, rim	1	3.2
		Pearlware, blue-glazed	1	0
		Pearlware, rim	1	1.5
		Porcelain	1	0.8
		Porcelain, blue-glazed, rim	1	0.7
		Spike, wrought iron	1	71.6
		Stoneware	6	9.7
		Stoneware, brown glazed	4	9.7
		Stoneware, glazed	1	4.4
		Stoneware, glazed	1	18.1
		Stoneware, glazed, burned,	1	2.4
	LV 3	Bone, uid fragments	17	5.9
		Bone, uid fragments, burned	2	1.2
		Bone, uid vertebra	6	0
		Brass clip w/ rose motif	1	6.6

Table 12 (continued). Main Road EU 3 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 3	LV 3	Brass, uid fragment	1	0.5
		Brick fragments	2	2.1
		Button, brass	1	1.3
		Clay pipe stem	1	1.5
		Container glass, light blue-green	2	1
		Container glass, olive green	6	8.1
		Creamware	6	5
		Earthenware, glazed, burned	2	9.7
		Earthenware, hand painted rim and body-bur	3	4.2
		Earthenwareware, glazed -burned	1	2.3
		Glass fragments	6	32.9
		Iron cookong pan/oven fragment	1	1809.8
		Lead shot	1	1.7
		Metal, uid fragments	5	6.6
		Nail, machine cut	1	1.8
		Nail, machine cut, fragments	7	23.3
		Nail, uid fragments	40	52.1
		Nail, wrought iron fragments	6	24.7
		Pearlware, blue transfer print, rim and body	3	1.4
		Pearlware, hand-painted polychrome	1	1.8
		Shell, clam	1	62.5
		Stoneware	1	0.7
		Stoneware, glazed w/ gray paste	1	1.8
		Stoneware, glazed, bottle base	1	19.6
		Uid fish scales	2	
		Whiteware	2	2.5
	LV 4	Creamware	1	0.5
		Metal, uid fragments	3	3.4
		Nail, brass	1	3
		Nail, uid fragment	1	2
		Nail, wrought iron	1	6.4
	LV 5	Bone, uid vertebra	1	0
	LV 6	Earthenware, glazed, burned	1	0.8
		Metal, uid fragments	2	3
	Wall Cleaning	annularware	1	6.2
		cut nail fragment	1	2.5
		uid nail fragments	2	2



Figure 14. Excavation Unit 2 and Feature 1 at the base of Level 4.

Table 13. Main Road EU 2 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
EU 2	Feature 1	Brick fragments	6	158.8
		Container glass, light green/blue	1	0.1
		Container glass, olive green	1	1.5
		Creamware	1	2.8
		Creamware, brown glazed	1	1.1
		Mortar	2	33
		Nail, machine cut	1	2.2
		Nail, wrought iron	1	9.3
		Nail, wrought iron, fragment	1	7.6
	LV 1	Brick fragments	2	4.8
		Container glass, light green/blue	1	1.6
		Container glass, olive green	1	4.2
		Glass, colorless fragment	1	0.1
		Metal, uid fragments	4	6
		Nail, uid fragments	3	5.6
		Pearlware	2	3.8
		Pearlware base	1	1.5
		Pearlware, blue transfer print	1	0.8
	LV 2	Annularware	1	0.5
		Annularware, rim	1	1
		Annularware, rim	1	12
		Bone, uid tooth fragments	2	2.2
		Brass, uid hardware	1	25.6
		Brick fragments	9	19.8
		Button, brass	1	7.4
		Clay pipe stem with bowl	1	4
		Clay pipe stems	4	9.5
		Container glass, light green/blue	2	0.6
		Container glass, olive green	14	81.9
		Creamware	12	55.9
		Creamware rim	1	0.8
		Creamware rim	1	2.1
		Creamware, decorated, rim	1	0.5
		Creamware, hand-painted	1	0.6
		Glass, aqua, fragments	1	1.1
		Glass, colorless, fragment	1	0.5
		Metal, uid fragments	9	22.2
		Nail, machine cut fragments	2	14.9
		Nail, uid fragments	30	72.3
		Nail, wrought iron, fragments	4	20.7
		Pearlware	4	7
		Pearlware base	1	5.5
		Pearlware, blue transfer-print	1	0.6

Table 13 (continued). Main Road EU 2 Levels and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
		Pearlware, green shell-edged , rim	1	1.4
		Porcelain	2	0.6
		Porcelain, underglaze blue rim	1	2.2
	LV 3	Barnacle	1	1.3
		Bone, aves long bone	1	0.1
		Bone, pig (sus scrofa) tusk	1	5.3
		Bone, turtle carapace	5	6.8
		Bone, uid fragments	14	11.6
		Bone, uid fragments, burned	4	4.5
		Bone, uid tooth fragments	3	3.4
		Brass, uid	1	1.1
		Brick fragment	1	27.2
		Brick fragments	26	64.3
		Button, bone	1	0.6
		Container glass, patinated	1	7.6
		Container glass, light blue/green	4	0.9
		Container glass, olive green	3	9.5
		Creamware	7	31.8
		Creamware rim	1	2.1
		Creamware, decorated, rim	1	1.6
		Earthenware, glazed rim, burned	1	3.9
		Flat glass, light blue/green	2	1.1
		Glass fragment, light green	1	0.3
		Glass, colorless fragment	1	0.9
		Iron bar	1	164.8
		Metal, uid fragments	15	16.5
		Mortar	1	8.7
		Mortar	1	62.7
		Nail, machine cut	9	63.5
		Nail, uid fragments	37	125.3
		Nail, wrought iron fragments	5	20.1
		Nails, brass	2	6.1
		Pearlware	1	3.5
		Pearlware, blue transfer print	1	1.7
		Pearlware, blue transfer print, rim	1	0.7
		Pearlware, hand-painted, rim	1	3.9
		Pearlware, hand-painted, ring-base	1	6.2
		Pearlwareblue, shell-edged, rim	1	10
		Shells, oyster	4	167.6
		Spike, wrought iron	2	41.1
		Whiteware, burned	1	0.8
	LV 4	Bone, uid fragment, burned	1	5.3
		Container glass, olive green	1	2.6
		Creamware	1	1
	LV 5	Glass, colorless fragment	1	0.2
		Mortar	1	6.8
	LV 6	Nail, uid fragment	1	3.1

The artifacts recovered from EU 2 were typical of those already encountered during shovel testing and in EU 1, but in relatively larger amounts (Table 13). In addition to oyster shell, there were smaller amounts of other faunal remains such as fish vertebra, turtle bones, some mammal teeth. With the exception of a large pig tusk, all the vertebrate faunal remains were related to small animals.

Architecturally related artifacts included machine cut and wrought iron nails and nail fragments along with fragments of red clay brick and tabby/mortar. Most of the nails, as elsewhere, were badly corroded, and it was not possible to distinguish more diagnostic traits. A small number ($n=2$) of brass wrought nails, or tacks, were recovered, which were possibly used for roofing or in furniture.

By far the most numerous and diagnostic artifacts were ceramics which consisted mostly of different types of pearlware and creamware that have commonly been recovered from slave sites on Cumberland Island and elsewhere in southeast Georgia. Pearlware types included blue transfer print, green and blue shell edged wares, annular wares, and under glaze blue hand painted ware. Most of the creamwares were plain. Two small fragments of porcelain were also recovered as were numerous glass fragments. Most of the latter were dark green, some heavily patinated. These are commonly associated with liquor bottles, but there were also clear and light green/blue vessel fragments. Clothing and personal items were limited to buttons (1 bone, 1 large brass disk type) and pipe stem fragments.

ARTIFACT ANALYSIS AND INTERPRETATION

Architecture

Although the excavations were not extensive enough to determine structure dimensions or other architectural details, the recovered artifacts indicate these structures were similar to other previously investigated slave cabins. A typical slave cabin in southeastern Georgia of the nineteenth century was a square or rectangular pine wood frame structure measuring anywhere from 18 x 18 to 16 x 21 square feet (Fairbanks and Ascher

1971:8; Ehrenhard and Bullard 1981:33). The frame was held together with iron spikes, and covered with pine boards secured with wrought iron and/or machine cut nails. Shingles were nailed to the rafters with smaller nails or held in place by poles which were nailed to the rafters and purlins (Otto 1984:38). These cabins often rested on piers to raise them off the ground with a fireplace and chimney located at one end of the building. Nail types recovered at the Main Road were similar to those recovered at other slave cabin sites (Singleton 1980:137; Ehrenhard and Bullard 1981:57; Otto 1984:38). Overall, 643 nail and nail fragments were recovered during the Main Road area testing. Most of these ($n=490$) were unidentifiable nail fragments but were most likely the remains of machine cut and wrought iron nails. Whole and identifiable nails consisted of machine cut ($n=72$), wrought iron ($n=76$), and small brass nails ($n=5$). The brass nails which were in good condition, were hand wrought and measured from 23 to 35 mm along the shank.

A standing brick chimney, or at least a large brick pile from a collapsed chimney, often marks the location of a slave cabin. In the case of the Main Road cabins, only a light scatter of mortar and red clay brick fragments are visible on the surface. Excavations revealed more fragments of mortar and brick beneath the surface but no whole examples of tabby or red clay brick, which suggests they were similar to those identified at the Rayfield and Stafford plantations. Those consisted of a foundation of rubble capped with tabby brick supporting a firebox of red clay brick and outer shell of tabby brick. Tabby or red clay brick was then used to form the chimney stack. Based on the rounded impressions in some of the tabby/mortar fragments it appears that it was used as a form of daub plastered onto a stick frame, and the chimneys may have been a version of stick and clay types which were also common among slave structures of South Carolina and Georgia in the eighteenth and nineteenth centuries (Otto 1984:42; Ferguson 1992:67). Fragments of coquina, a natural form of tabby composed of loosely cemented quartz sand and mollusc shell, were also present. This type of material, which does not occur naturally on Cum-

berland Island, was probably brought to the island from Florida where it is found in formations near St. Augustine and as far south as Palm Beach.

Ten fragments of flat light blue to green (n=7) and colorless (n=3) window glass were identified among the Main Road collections. It is possible that some of the smaller samples may represent the remains of flat sided vessels, although window glass has often been recovered from slave cabin sites (Ehrenhard and Bullard 1981:61–62; Otto 1984:38).

Kitchen

Kitchen artifacts are related to the preparation, processing, serving, storage, and procurement of food as well as the sources—domestic or nondomestic—of the food itself (Singleton 1980:140–141). The most common remains assigned to this artifact class recovered at the Main Road (Field# 1902.02) consisted of ceramics, container glass, and faunal remains.

A total of 223 ceramic sherds were recovered at 1902.02. All of these were historic period wares dating from the late eighteenth to mid-nineteenth century. The largest number are varieties of refined earthenwares such as creamware, pearlware and a smaller number of whiteware. Stoneware is also present along with a small number of porcelain sherds. A mean ceramic date of 1830.81 derived from the known manufacture dates of the recovered ceramics is consistent with the historic documentation available for the time of site occupation, i.e., 1827 up to the Civil War. Previous investigations of slave cabins (Ehrenhard and Bullard 1981:45; Otto 1984:61) have revealed mean ceramic dates which are generally somewhat earlier than the known occupation dates of particular sites. The early ceramics date for the Main Road appears to follow this pattern as well.

A total of 135 kitchen related glass artifacts were identified among the assemblage. In most cases, the fragments were too small to determine the vessel form other than as some type of container (n=105). The remainder (n=30) were fragments that were too small to identify as container glass. Of the container fragments, sixty-eight were dark olive green shards attributed to wine or liquor

bottles common in the nineteenth century. At least two small colorless medicine bottles are also represented (Catalog #'s CUIS 49269, and 49423)

The remains of a large iron skillet (Catalog # CUIS 49698), or oven was found in the NE corner of EU 1 adjacent to the pile of brick and mortar fragments, which was presumably the location of the cabin's chimney. The remains of iron cooking pots or vessels have also been recovered at the Rayfield and Stafford slave cabin sites on Cumberland Island (Ascher and Fairbanks 1971:10; Ehrenhard and Bullard 1981:56), and the Butler plantation (Singleton 1980:159) adjacent to chimney falls or hearths. The remains of an iron hoe blade (Catalog # CUIS 49303) were recovered from the midden located at 525E, 480N.

Faunal remains were also recovered but analysis has not been detailed enough to identify particular animal species. The remains, which are in most cases small fragmented pieces, represent a selection of bird, mammal, fish, turtle, and frogs, in addition to the large amount of oyster and clam shell present in the midden. The fragmentary and poorly preserved nature of the faunal material is consistent with other slave sites. It was common for slaves to prepare much of their food by boiling, or simmering it in large pots. This included the bones, which were often broken open prior to stewing to release the marrow (Ascher and Fairbanks 1971:11, Otto 1984:60).

In addition to domestic sources of chicken, pig, and cow, slaves often included many non-domestic animal species in their diet, such as deer, raccoon, and possum. These and other animal species could be hunted and trapped in nearby forests. Although it is often assumed slaves were not typically allowed to own firearms, evidence of firearms such as gunflints and lead shot are often recovered from slave settlements (Ascher and Fairbanks 1971:13; Singleton 1980:166; Ehrenhard and Bullard 1981:61; Otto 1984:45). The only item related to firearms, or hunting found at 1902.02 was one lead shot, about 7 mm in diameter (Catalog # CUIS 49685), which was recovered from EU 3.

Furniture

The only evidence of furniture is a small upholstery

tack (Catalog # CUIS 49357) having a small lozenge-shaped, concavo-convex back with welded brass shank. These tacks were not only used to secure leather to chairs, but were often used to decorate furniture, harness, and coaches (Noël Hume 1969:227–228).

Clothing

Clothing related artifacts are represented by a small selection of buttons and buckles. The buttons include three undecorated brass disc types, and one plain bone button. The three brass buttons range are 13 mm (Catalog # CUIS 49684), 14 mm (Catalog # CUIS 49425), and 34 mm (Catalog # CUIS 49552) in diameter with central eye piece. The bone button (Catalog # CUIS 49577) is a plain disc, 18 mm across, with a single hole drilled through the center.

Other clothing items included the remains of two buckles. One (Catalog # CUIS 49292), recovered from the midden (525E, 480N), is a large brass harness-type buckle with two teeth on the loop of the frame. The other (Catalog # CUIS 49475) consists of a partial iron frame with attached pin recovered from EU 1.

One other item which appears to be clothing related is a decorative clip made of brass or copper alloy attached to a sheet of the same material stamped into a flower pattern, and coated with a grayish green enamel (Catalog # CUIS 49692).

Tobacco

Tobacco pipes and fragments are commonly recovered from slave settlements. In this case a total of eight fragments were recovered, most of which were only stem fragments. Two examples retain a portion of the pipe bowl with the stem, although no maker's marks or other diagnostic traits are apparent.

Miscellaneous Activities

Very few other activities are represented in the artifacts recovered from the Main Road. One possible exception is an object tentatively identified as sail and packing needle recovered from EU 1 (Catalog # 49715), although the example is badly

corroded. It is approximately 9 cm long with a rounded shank and flanged tip.

SUMMARY OF RESULTS

The goals of this survey was to locate the remains of the historic structures shown on the 1827 map along this section of the Main Road, and to determine site boundaries if archeological remains were present. To achieve the second goal, shovel testing was focused away from the road where the structures would have stood, to determine the extent of any associated artifact scatters. Shovel testing was followed by limited excavation of 1 x 1 meter units to investigate the nature of the visible surface scatters of brick and mortar fragments believed to be associated with historic structures, and a historic midden identified during shovel testing.

The results of the shovel testing and excavations indicate that the remains of historic structures and their associated artifact assemblages are present on both sides of the Main Road. The distribution of positive shovel tests containing early nineteenth century artifacts indicates the site extends approximately 180 meters north-south along the Main Road (beginning 40 meters north of the intersection with Coleman Avenue) and at least 40 meters to the east of the road. Because cabins were also located on the west side of the road, the site most likely extends another 40 meters to the west, giving site dimensions of approximately 180 x 80 meters. The artifact assemblage, when compared with those from other slave settlements in southeast Georgia (Rayfield, Stafford, Cannon's Point, Butler), suggests the structures are in fact those of a former slave cabin complex. Additional extensive excavations should be undertaken to identify the architectural details of the cabins and to obtain a more representative sample of artifacts which could better reflect the daily activities and lifestyle of the Dungeness slaves. Ultimately, a better understanding of this site would allow for comparisons with other Cumberland Island plantations and those elsewhere, and enable a more accurate interpretation of the site for the public.

DUCK POND (1902.03)

The third phase of the Dungeness Tract survey focused on the area of the Carnegie-era Duck Pond (Field# 1902.03), which began May 17. Another arbitrary grid was thus established covering the area where the remains of another complex of early nineteenth century structures are believed to have existed (Figure 15). According to historic maps, at least twelve structures were located in the area by 1802. Ten were located just south of a small tidal inlet now occupied by the Carnegie-era Duck Pond. Another two were located on the north bank of the inlet. The Duck Pond area is also the site of a large cottage that was built for Thomas Morrison Carnegie, Jr. sometime around 1886 and destroyed by fire in the 1940s. The cottage grounds also included an extensive garden of exotic plants, the Duck Pond, and at least two small wood frame structures. The Duck Pond, a large kidney-shaped masonry enclosure, was constructed in the small tidal inlet near an artesian well located on the north bank of the inlet. Although now dry and overgrown with plants, the pond is still readily visible next to the service road leading to the private residence which is now located near the site of the old cottage. After the cottage was destroyed by fire, the ruins were bulldozed and removed from the site, but the associated gardens and two small structures associated with the cottage still exist, surrounded by thickets of bamboo and other exotic plants covering much of the area south of the pond. The area on the north bank of the inlet/Duck Pond is more typical of a maritime forest of oaks and palmettos, with intrusive stands of bamboo criss-crossed by horse trails leading to the artesian spring. The spring, enclosed by a small rectangular masonry basin with intact well fittings and valves, was free flowing at the time of the 2004 archeological survey.

The datum 500E, 500N was established 20 meters southeast (198° Mag. N) of the eastern end of the Duck Pond. South of the Duck Pond, the shovel test grid was extended at 10 meter intervals to 400N and to 430E. North of the pond, the grid was extended to 610N, and from 510E to 400E. Many of these grid positions were not tested due to

bamboo thickets, trees, or other obstructions (Figure 15). A total of seventy-eight shovel tests were dug in the Duck Pond survey area (Table 14).

ARCHITECTURAL REMAINS

Along the eastern edge of the existing gardens, where the cottage once stood, shovel testing revealed a scatter of historic architectural debris related to the former cottage. These artifacts consisted mainly of red clay brick fragments, mortar, machine cut and wire nails and fragments, window glass, slate, pieces of granite, and a large door hinge and spring.

Although most of the architectural evidence recovered in this area is related to the Carnegie-era cottage, some evidence of what may be earlier nineteenth century construction was evident north of the pond. In ST-56 (490E, 560N) a fragment of tabby (Catalog # CUIS 49962) was recovered along with a small brick fragment (Catalog # CUIS 49960). Both of these were associated with a porcelain button common to the early nineteenth century. Further testing in the area did not reveal a large amount of historic artifacts however.

KITCHEN-RELATED ITEMS

A small number (n=24) of early historic ceramics such as creamware, pearlware, and other types were identified during testing. Most of these were concentrated on the south bank of the inlet/Duck Pond where the early structures would have been, but the scatter was relatively light and there were no indications of architectural features or other evidence to merit putting in excavation units. Most intriguing was a fragment of Spanish olive jar (Catalog # CUIS 49970) recovered in shovel test 490E, 590N north of the pond. The fragment is too small to be diagnostic of a specific time period, however. Shovel tests placed at 410E, 610N and 420E, 610N where a small number of tabby bricks were visible on the surface did not reveal any concentrations of associated historic artifacts.

A total of 41 glass fragments were recovered during testing at 1902.03. Most of these fragments, other than those related to architecture, appeared

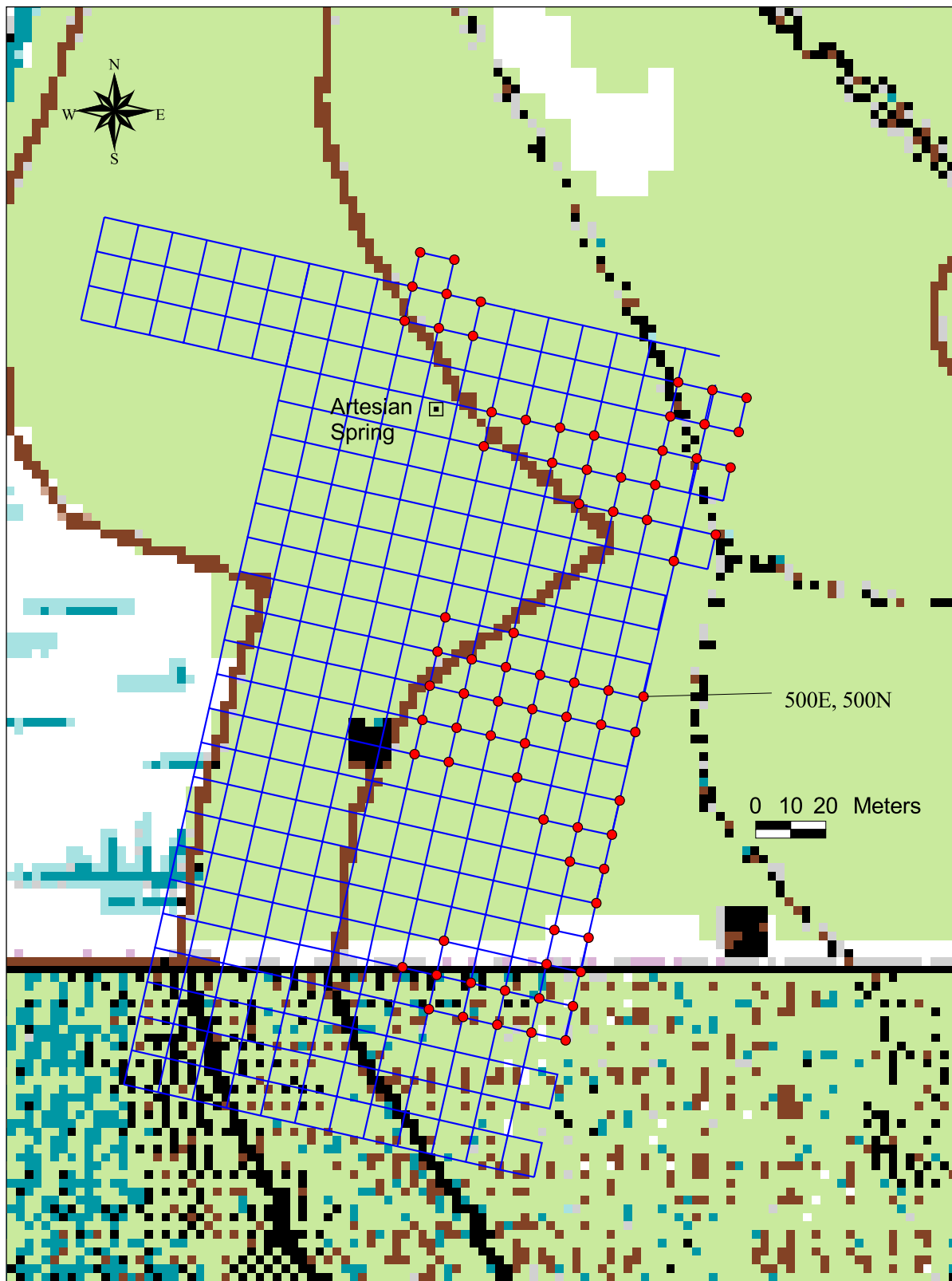


Figure 15. Duck Pond survey area (1902.03) and shovel test locations.

Table 14. Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 01	410E, 590N	Barbed wire	1	22
		Metal, uid fragments	2	2.2
		Mortar	1	2.6
		Uid-stamped, sand-tempered	2	7.1
ST 02	410E, 600N	Brass thermometer gauge, fragment	1	11.6
		Incised fiber-tempered pottery, rim, and body	2	13.8
ST 03	410E, 610N	Plain, sand-tempered pottery	1	4.3
		Plain, sand/grit-tempered pottery	3	1.4
ST 04	420E, 590N	Cord-marked, sand-tempered pottery	1	1.6
		Metal, uid fragment	1	1.2
		Plain, grog-tempered pottery	1	4.1
		Plain, sand-tempered pottery	3	1.4
		Uid-stamped, grog-tempered pottery	1	7.8
		Uid-stamped, sand-tempered pottery	1	4.7
ST 05	420E, 600N	Iron concretion	1	3.3
		Plain, grog-tempered pottery	2	4
		Plain, sand-tempered pottery, rim	1	2.9
ST 06	420E, 610N	Plain, grog-tempered pottery	1	3.9
		Plain, sand-tempered pottery	2	1.2
ST 07	430E, 590N	Plain, grog-tempered pottery	1	1.3
		Plain, sand-tempered pottery	1	1.3
		Uid burned bone fragment	1	0.6
ST 08	430E, 600N	Brick fragments	1	1.2
		Oyster shell	1	1.6
		Pearlware, hand-painted, rim	1	1.4
		Plain, fiber-tempered pottery	1	0.7
		Plain, grog-tempered pottery	1	4
		Plain, grog-tempered pottery	1	6.9
		Plain, sand-tempered pottery	1	2.5
		Uid-stamped, sand-tempered	1	10.7
		Uid-stamped, sand-tempered pottery	1	3.1
ST 09	440E, 470N	Brick fragments	2	5.3
		Glass fragment, light blue-green	1	0.4
		Plain, sand-tempered	5	7.8
		Stoneware, glazed	1	0.4
		Uid stamped w/ cane punctation	1	5.7
		Uid-stamped, sand/grit tempered pottery	7	31
ST 10	440E, 480N	Bone, uid fragment	1	0.6
		Coal	3	5.1
		Cord-marked, sand-tempered pottery	1	1.7
		Nail, uid fragment	1	4
		Plain, sand-tempered pottery	1	3.5
		Uid stamped, sand-tempered pottery	2	4

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 11	440E, 490N	Bone, uid fragment	1	0.2
		Container glass, green	1	0.9
		Earthenware, glazed	1	0.8
		Nail, uid fragment	1	0.8
		Pearlware, blue transfer-print	1	0.5
		Plain, sand-tempered pottery	1	2.8
		Terracotta	3	5.4
		Uid-stamped, sand-tempered pottery	1	1.3
ST 12	440E, 500N	Earthenware, glazed	1	2.9
		Glass, patinated	1	2.6
		Plain, fiber-tempered pottery	6	50.3
ST 13	440E, 510N	Cord-marked, sand-tempered pottery	1	1.3
		Earthenware, glazed , rim	2	3.8
		Plain, sand-tempered pottery	2	4.9
ST 14	440E, 560N	Bone, uid fragment	1	0.3
		Cord-marked, sand-tempered pottery	1	2.7
		Plain, fiber-tempered pottery	3	2.6
		Plain, sand-tempered pottery	5	10.3
		Uid stamped, sand-tempered pottery	1	2
ST 15	440E, 570N	Uid stamped, sand-tempered pottery	1	0.9
ST 16	450E, 410N	Brick fragments	2	37.9
		Plain, sand-tempered pottery	3	3.9
ST 17	450E, 470N	Glass fragment, patinated	1	1.1
		Metal, uid fragment	1	0.6
		Nail, machine cut, fragment	1	4.5
ST 19	450E, 490N	Bone, uid fragements, burned	1	0.8
		Bone, uid fragments	8	2.5
		Bone, uid otolith	1	0.4
		Bone, uid vertebra	2	3.7
		Charcoal	2	0.3
		Coal	1	0.7
		Concretions	4	4.9
		Cord-marked, sand-tempered pottery	2	2.1
		Metal, uid fragment	1	0.8
		Nail, uid fragment	1	0.9
		Plain, fiber-tempered pottery	3	21.6
		Terracotta	3	34
		Uid stamped, sand-tempered pottery	1	3.6
		Wire	3	13.5
ST 20	450E, 500N	Bone, uid fragments	8	1.5
		Coal slag	1	10.2
		Cord-marked, sand-tempered pottery	2	2.1
		Creamware	1	2.8
ST 21	450E, 570N	Bone, uid, fragment, burned	1	0.5
		Plain, grog-tempered pottery	2	38.9

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 21	450E, 570N	Plain, sand-tempered pottery	2	5.2
		Uld stamped, sand-tempered pottery	1	4.4
ST 22	460E, 400N	Bone, uid fragment	1	1.1
		Charcoal	2	1.9
		Coal	10	5
		Coal slag	2	2.7
		Container glass, olive green	1	0.7
		Flat glass, light blue-green	37	69.7
		Flat glass, colorless	1	2.5
		Flat glass, frosted	11	19.4
		Slate, red	1	1.7
ST 23	460E, 410N	Brass, uid fragment	1	1.2
		Brick fragment	1	0.3
		Coal	1	1.2
		Flat glass, light blue-green	81	121.1
		Flat glass, colorless	4	6.6
		Mortar	1	0.5
ST 24	460E, 420N	Barbed wire fragment	1	3.3
		Brick fragments	6	11.9
		Coal	1	0.3
		Coal slag	2	0.7
		Metal, uid fragments	2	0.6
ST 25	460E, 480N	Container glass, colorless	1	1.1
		Container glass, light blue-green	1	3.4
ST 26	460E, 490N	Brick fragments	2	3.9
		Metal, uid fragment	1	11.4
		Plain, sand-tempered pottery	1	8.7
		Uld stamped, sand-tempered pottery	1	2
ST 28	460E, 510N	Brick fragment	1	1.6
		Container glass, olive green	1	17.7
		Creamware	1	5.7
		Plain, fiber-tempered pottery	1	6.7
		Uld-stamped, sand-tempered pottery	1	6.7
ST 29	460E, 560N	Plain, fiber-tempered pottery	1	0.8
		Plain, grog-tempered pottery	1	4.5
		Plain, sand-tempered pottery	1	1.4
ST 30	460E, 570N	Bone, uid tooth	1	0.4
		Bone, uid fragments	3	2.6
		Plain, fiber-tempered pottery	1	3.9
		Plain, grog-tempered pottery	2	6.2
		Plain, sand-tempered pottery	2	4.8
		Uld-stamped, sand-tempered pottery	1	4.1
ST 31	470E, 400N	Mortar	1	4.3
		Plain, fiber-tempered pottery	1	2.7
		Plain, sand-tempered pottery	1	0.5

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 32	470E, 410N	Ehiteware	1	1
ST 33	470E, 470N	Brick	1	5.3
		Check-stamped, sand-tempered pottery	1	1.8
		Cord-marked, sand-tempered pottery	2	2.4
		Incised, sand-tempered pottery	1	5.3
		Lead fragment	1	4.6
		Mortar	1	3.5
		Nail, uid fragment	1	1
		Plain, fiber-tempered pottery	1	14.4
		Plain, sand-tempered pottery	1	2.4
ST 34	470E, 480N	Brick fragment	1	2.3
		Creamware	1	1
		Uid-stamped, grog-tempered pottery	1	4
ST 35	470E, 490N	Bone, uid fragment, burned	1	0.9
		Brick fragments	2	35.7
		Brick, gray, fragment	1	28.8
		Cord-marked, sand-tempered pottery	2	1.6
		Nail, uid fragment	1	2
		Plain, sand-tempered pottery	1	4.4
		Slate, gray	1	33.1
ST 36	470E, 500N	Cord-marked, sand-tempered pottery	1	3.9
		Creamware, shell-edged	1	8.8
ST 37	470E, 550N	Granite	1	76.9
		Plain, grog-tempered pottery	2	9.8
		Plain, sand-tempered pottery	1	3.1
ST 38	470E, 560N	Bone, uid fragment	1	0.3
		Brick fragments	2	1.3
		Coal	1	0.3
		Coal slag	1	1.3
		Glass, patinated	1	1
		Plain, grog-tempered pottery	1	2.4
		Plain, sand/grit-tempered pottery	1	2.2
ST 39	470E, 570N	Bone, uid fragment	1	2
		Concretion	1	4.2
		Plain, fiber-tempered pottery	4	2.5
		Plain, sand-tempered pottery	1	2
		Plain, sand-tempered pottery rim	1	2.3
		Uid stamped, sand-tempered pottery	1	4.2
ST 40	480E, 400N	Container glass, light blue-green	2	2.7
ST 41	480E, 410N	Bone, uid fragment	1	0.3
		Brick fragments	6	27.1
		Coal slag	1	7.2
		Container glass, amber	2	1.3
		Flat glass, colorless	1	0.1
		Flat glass, colorless	1	0.7

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 41	480E, 410N	Flat glass, colorless, patinated	2	3.7
		Metal, uid fragment	1	0.4
		Nail, uid fragments	2	6.2
ST 42	480E, 460N	Brick fragments	2	5.3
		Container glass, light blue-green	3	40.4
		Flat glass, colorless	1	0.4
		Glass, colorless, burned/melted	3	34.6
		Metal hinge	2	304.9
		Nail, machine cut, fragments	3	13.7
		Slate, gray	1	16
ST 43	480E, 490N	Bone, uid fish, fragments	2	0.3
		Brick fragments	2	4.9
		Creamware	1	1.1
		Glass fragments, olive green, patinated	2	2.1
		Plain, sand-tempered pottery	2	6.9
		Porcelain rim	1	0.8
ST 44	480E, 500N	Brick fragments	3	3.3
		Spike	1	19.1
		Tack, iron	1	1.7
ST 45	480E, 550N	Plain, grog-tempered pottery	3	19.5
		Plain, sand-tempered pottery	3	3.7
ST 46	480E, 560N	Plain, grog-tempered pottery	2	30.9
		Plain, sand-tempered pottery	2	6.7
ST 47	490E, 400N	Fiber-tempered pottery, rim and body sherd	5	53.5
		Incised grog-tempered	1	7
		Plain, sand-tempered pottery	3	13.7
ST 48	490E, 410N	Brick fragment	1	8.5
		Coal slag	1	28.9
		Container glass, olive green patinated	2	24.4
		Plain, grog-tempered pottery	1	59.4
		Uid stamped, sand-tempered pottery	1	2.5
ST 49	490E, 420N	Glass, colorless	1	0.3
ST 50	490E, 430N	Brick fragments	3	13
		Cord-marked, sand-tempered pottery	1	5.5
		Mortar	2	9.5
ST 51	490E, 450N	Brick fragments	4	30.9
		Coal slag	1	1.3
		Glass, colorless, burned	1	2.6
		Metal screw	1	4.8
		Metal, uid fragment	1	8.4
		Mortar	1	16.9
		Nail, uid fragments	4	12.8
		Nails, machine cut	2	30.1
ST 52	490E, 460N	Brick fragments	2	6.6
		Container glass, green	1	0.5

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 52	490E, 460N	Container glass, olive-green	1	0.6
		Cord-marked, sand-tempered pottery	1	2.5
		Glass, colorless	1	0.8
		Mortar	4	118.9
		Nails, wire	2	9.8
ST 53	490E, 490N	Brick fragments	3	7.3
		Button, bone	1	0.3
		Nail, uid fragment	1	1
ST 54	490E, 500N	Brick fragments	10	10.7
		Container glass, colorless	6	6.7
		Glass, patinated	1	0.3
		Metal spring	5	52.6
		Nail, uid frags	13	9.8
		Plain, sand-tempered pottery	1	3.7
ST 55	490E, 550N	Bone, uid fragment	1	3.2
		Plain, grog-tempered pottery	1	9.7
		Plain, sand-tempered pottery rims	2	1.9
ST 56	490E, 560N	Brick fragment	1	1.3
		Button, porcelain	1	0.7
		Tabby mortar	1	77.2
ST 57	490E, 570N	Plain, fiber-tempered pottery	1	2.9
		Plain, grog-tempered pottery	3	8.5
ST 58	490E, 580N	Check-stamped, sand-tempered pottery	1	4.9
		Plain, grog-tempered pottery	1	4
		Plain, sand-tempered pottery	1	5.5
		Shell, whelk, with possible extraction hole	1	43.2
		Uid stamped, sand-tempered pottery	2	2.9
ST 59	490E, 590N	Olive jar sherd	1	14.3
		Plain, sand/grit-tempered pottery	1	2.4
ST 61	500E, 410N	Plain, fiber-tempered rim and body sherd	2	11.3
ST 63	500E, 430N	Bone, uid fragment	1	0.1
		Nail, uid fragments	2	3.2
ST 64	500E, 440N	Brick fragments	6	92.5
		Glass, colorless	1	1
		Granite	4	29.6
		Lithic, uid	1	4.1
		Nail, uid fragments	5	3.6
		Plain, grog-tempered pottery	2	4.6
		Tabby mortar	1	11.3
ST 65	500E, 450N	12 gauge shotgun shell fragment	1	5.7
		Bone, uid tooth	1	0.2
		Bone, uid, burned	1	0.6
		Brick fragments	10	12.3
		Charcoal	3	0.5
		Chert debitage	1	8.4

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 65	500E, 450N	Clay pipe stem	1	2.9
		Coal	6	65
		Container glass, olive-green	1	4.7
		Container glass, colorless	1	0.9
		Creamware, rim	1	0.5
		Glass, brown	3	0.5
		Granite	1	44.1
		Metal, uid fragments	4	1.2
		Mortar	2	48.9
		Mortar with brick fragments	2	83
		Nail, uid fragment	1	1.4
		Nail, uid fragment	1	1.8
		Nail, wire	1	1.9
		Nails, machine cut	2	9
		Plain, sand-tempered pottery	1	1.1
		Sandstone	14	34.5
		Slate, gray	1	0.5
		Spike	1	34.7
ST 66	500E, 460N	Brick fragments	9	13
		Cord-marked, sand-tempered pottery	4	8
		Metal, uid fragments	2	0.8
		Plain, grog-tempered pottery	1	5.1
		Redware, glazed	1	4.7
		Uid stamped, sand-tempered pottery	1	7.4
ST 67	500E, 470N	Brick fragments	12	18.8
		Coal	1	13.1
		Nail, uid fragment	1	3.8
		Plain, sand-tempered pottery	1	7.2
		Slate, gray	1	1.8
ST 68	500E, 490N	Brick fragment	1	0.5
		Glass, colorless	1	0.4
		Plain, sand-tempered pottery	1	0.9
ST 69	500E, 500N	Bone, uid, fragment, burned	1	0.3
		Brick fragments	6	6.1
		Coal	6	12.1
		Nail, uid fragments	3	9
		Pearlware, blue, transfer-print	1	1.5
		Plain, grog-tempered pottery	1	6.2
		Plain, sand-tempered pottery	2	4.9
		Sand-tempered sherd with possible mending	1	9.7
ST 70	500E, 540N	Cord-marked, sand-tempered pottery	2	3.6
		Metal, uid fragment	1	1.1
		Plain, grog-tempered pottery	3	26.4
		Uid-stamped, grog-tempered pottery	1	5.5
ST 71	500E, 570N	Bottle cap fragment	1	1.5

Table 14 (continued). Duck Pond Shovel Tests and Associated Artifacts.

EU #	Provenience	Description	Ct.	Wt. (g)
ST 71	500E, 570N	Nail, wire	1	2.6
ST 74	504E, 430N	Brick fragments	3	5.6
ST 75	510E, 550N	Metal, uid fragment	1	1.3
		Uid stamped, sand-tempered pottery	2	4.5
ST 76	510E, 570N	Check-stamped, stand-tempered pottery	1	0.5
		Plain, sand-tempered	1	0.9
ST 77	510E, 580N	Plain, grog-tempered pottery	1	9.8
		Plain, sand-tempered pottery	2	8.7
ST 78	510E, 590N	St. Johns check-stamped, stand-temper	1	4
		St. Johns plain	2	3.3

to date to the Carnegie-era (i.e. the late nineteenth and early twentieth centuries). Fragments (Catalog # CUIS 49927) of a dark green bottle were recovered at 490E, 410N; these are heavily patinated and consist of a partial mouth, lip, finish (neck), and shoulder. They appear to be the remains of one of several types of dark green wine bottles common in the late eighteenth century (Noël Hume 1969:60–71).

Faunal material recovered at 1902.03 was represented by 41 skeletal elements including teeth, an otolith, and vertebra, but mostly small unidentifiable bone fragments, some of which had evidence of burning. The remains were recovered from across the site, and were often mixed with an assortment of prehistoric and historic materials. The remaining faunal material included a small busycon shell with a possible extraction hole that was recovered in ST-58 (490E, 580N) in association with a small number of prehistoric ceramics.

CLOTHING

Clothing items were represented by two buttons, both of which were recovered along the 490E transect. The first is a one piece bone button (Catalog # CUIS 49948). It is similar to a Type 14 illustrated by Noël Hume (1969:90–91), a type more common to the eighteenth century. Having a central shank, it would normally have an eye piece screwed into it, but that portion is missing from this example.

The second button (Catalog # CUIS 49961) is made of porcelain (Type 23) with a convex front

and back, and four holes in a recessed center. These types of buttons are attributed to the early nineteenth century, ca. 1800–1830 (Noël Hume 1969:90–91).

MISCELLANEOUS ACTIVITIES

Most of the artifacts not attributable to architectural or kitchen artifact groups are represented by fragments of unidentifiable metal and hardware, barbwire, and charcoal. One item, found to the north of the pond, at 410E, 600N is a fragment of a copper thermometer gauge recovered in ST-2. The top of the copper plate is inscribed “J.M. THORNBURN & CO. New York”—a company involved in the distribution of horticultural products in the late nineteenth and early twentieth century. Other items assigned to this group included a clay tobacco pipe fragment and the brass base to a modern shotgun shell.

PREHISTORIC CERAMICS

A total of 190 prehistoric ceramic sherds were recovered during shovel testing at the Duck Pond. These were sorted according to tempering and surface decoration. Sand-tempered plain and decorated wares made up the largest percentage (n=104) of the total, with most of these being plain varieties. Although a detailed analysis of the sherds has not been undertaken, most appear to be Woodland and Mississippian period types, including St. Johns Check Stamped (n=1) and St. Johns Plain (n=2). Fiber tempered plain (n=25), incised (n=2),

and simple-stamped (n=5) wares represented the earliest types of ceramics recovered. The incised sherds (Catalog # CUIS 49724), recovered from ST-2 (410E, 600N) are possibly Orange period wares of north Florida having incised lines forming chevrons across the flattened rim of the vessel. The sherds were recovered next to a slight rise, or mounded area that could possibly be a small sand burial mound. The mound itself, which has a live oak growing from it, was not tested because of the concern for American Indian burials.

Most of the prehistoric material was limited to pottery fragments with the possible exception of a small piece of brown, water worn chert nodule with cortex (Catalog # CUIS 49995). Although it is identified as prehistoric, it was recovered from ST-65 (500E, 450N) along with brick fragments, charcoal, coal, a fragment of a shotgun shell, glass, nail fragments, prehistoric and historic ceramics, tobacco pipe stem, pieces of gray slate, granite

and sandstone. The presence of artifacts from all these various archeological periods in one test is representative of the overall nature of the Duck Pond area, which has been severely altered by the various construction activities that occurred here over the last two centuries.

Despite the lack of substantial evidence for early historic structures around the Duck Pond, features related to them may still very well exist in the area. Due to the presence of the remaining Cottage gardens and dense thickets of bamboo, large areas were not surveyed. In addition, the recovery of the olive jar sherd as well as numerous aboriginal sherds indicates that even earlier site components may remain intact there. Currently there are no apparent threats to these resources. Palm Avenue, which originally ran from the Dungeness dock to the cottage has been overtaken by forest and there are no regular visitors to the area, other than the horses drinking at the artesian spring.



Chapter 7

Summary and Recommendations

Results of testing in the Dungeness upper garden area to the south of the Dungeness ruins indicates that relatively intact (undisturbed) remains of a prehistoric shell midden are present in a large area, or areas, across the upper garden lawn at a depth of approximately 20 centimeters below the surface. The greatest concentration of these intact remains appear to be adjacent to the southwest corner wall of the small terraced garden attached to the mansion ruins and extending south to the terrace wall separating the upper and lower gardens. These remains also extend as far west as the road leading from the Dungeness Tabby House to Garden Point. The presence of these intact remains should be taken into consideration if any ground disturbing activities are to take place in the upper garden area. Otherwise no other work is recommended in this area at this time.

Pedestrian survey and subsurface testing along the Main Road north of the Dungeness ruins has revealed that the remains of historic structures are present on both sides of the road next to the Carnegie family cemetery. The remains of these structures and an associated artifact scatter encompassing an area approximately 180 meters north-south and 80 m east-west straddling the Main Road beginning 40 meters north of where it intersects with Coleman Avenue. On the west side of the road much of the site is located within the fenceline sur-

rounding the Carnegie family cemetery. There does not appear to be any immediate threats to the site although more extensive archeological excavation is needed to better identify and interpret the site.

Testing was also undertaken in the vicinity of the Carnegie-era Duck Pond to identify the remains of early nineteenth century structures related to the Greene-Miller plantation. Testing to the south of the Duck Pond indicated that most of the remains associated with these structures may have been obliterated by the later construction and demolition of the Carnegie-era Cottage. Testing to the north of the pond did not reveal substantial evidence of structures either, although this area is heavily wooded and overgrown with thickets of bamboo which hindered systematic testing. Therefore, remains of these structures may yet exist. Testing north of the Duck Pond also revealed prehistoric material and possibly a small burial mound in the area. A fragment of Spanish olive jar recovered during testing also indicates the possible presence of early historic remains related to the Spanish Mission period of the seventeenth century. There does not appear to be any immediate threats to this area, however, more systematic archeological survey is recommended to better delimit site boundaries and artifact distributions beyond the limits of the current survey.



Appendix 1

Collections From Dungeness Upper Garden (1902.01)

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 1	Zone A, LV 1	CUIS 49036	1.00001	Flat glass, colorless, solarized	1	0.7
EU 1	Zone A, LV 1	CUIS 49037	1.00002	Slate, gray	1	11.5
EU 1	Zone A, LV 1	CUIS 49038	1.00003	Nail, machine cut, fragments	2	3.3
EU 1	Zone A, LV 1	CUIS 49039	1.00004	Bone, uid fragment	1	0.2
EU 1	Zone A, LV 2	CUIS 49040	2.00001	Whiteware, Black-transfer print	1	0.7
EU 1	Zone A, LV 2	CUIS 49041	2.00002	Slate, gray	1	1.8
EU 1	Zone A, LV 2	CUIS 49042	2.00003	Jackfield ware	1	0.5
EU 1	Zone A, LV 2	CUIS 49043	2.00004	Uid-stamped, sand-tempered pottery	1	6.4
EU 1	Zone A, LV 2	CUIS 49044	2.00005	Savannah Check Stamped	1	4.2
EU 1	Zone A, LV 2	CUIS 49045	2.00006	Plain, sand-tempered pottery	4	24.4
EU 1	Zone A, LV 2	CUIS 49046	2.00007	Earthenware, glazed	1	1.1
EU 1	Zone A, LV 2	CUIS 49047	2.00008	Creamware, burned	1	1.1
EU 1	Zone A, LV 2	CUIS 49048	2.00009	Porcelain, blue glazed	1	0.6
EU 1	Zone A, LV 2	CUIS 49049	2.0001	Stoneware, glazed	1	4.6
EU 1	Zone A, LV 2	CUIS 49050	2.00011	Savannah Fine Cord Marked	1	6.2
EU 1	Zone A, LV 2	CUIS 49051	2.00012	Container glass, colorless	1	1
EU 1	Zone A, LV 2	CUIS 49052	2.00013	Mortar	1	10.5
EU 1	Zone A, LV 2	CUIS 49053	2.00014	Nail, uid, fragments	4	6.1
EU 1	Zone A, LV 2	CUIS 49054	2.00015	Nail, machine cut	1	4.3
EU 1	Zone A, LV 2	CUIS 49055	2.00016	Shark tooth	1	0.1
EU 1	Zone A, LV 2	CUIS 49056	2.00017	Nail, machine cut, fragments	2	8.8
EU 1	Zone A, LV 2	CUIS 49057	2.00018	Nail, wrought iron, fragment	1	5
EU 1	Zone A, LV 2	CUIS 49058	2.00019	Nail, wire	1	2.3
EU 1	Zone B, LV 3	CUIS 49059	3.00001	Whiteware, rim	1	12.6
EU 1	Zone B, LV 3	CUIS 49060	3.00002	Pearlware, rim	1	1.2
EU 2	Zone B, LV 5	CUIS 50160	13.0003	Savannah Burnished Plain	1	25.4
EU 2	Zone B, LV 5	CUIS 50161	13.00031	Uid-complicated stamped, sand-tempered	1	9.3
EU 2	Zone A, LV 3	CUIS 50158	11.00018	Savannah Burnish Plain	1	6.3
EU 2	Zone A, LV 3	CUIS 50159	11.00019	St. Johns Plain	1	3.5
EU 2	Zone A, LV 2	CUIS 50157	10.00016	Plain, sand-tempered pottery	1	8.2
EU 1	Zone B, LV 5	CUIS 50156	5.00007	Savannah Burnished Plain	1	13.9
EU 1	Zone B, LV 3	CUIS 49061	3.00003	Plain, sand-tempered pottery	8	14.3
EU 1	Zone B, LV 3	CUIS 49062	3.00004	Container glass, amber	1	6.3
EU 1	Zone B, LV 3	CUIS 49063	3.00005	Container glass, colorless	2	0.9
EU 1	Zone B, LV 3	CUIS 49064	3.00006	Nail, machine cut, fragments	3	11.9
EU 1	Zone B, LV 3	CUIS 49065	3.00007	Mortar	1	1.3
EU 1	Zone B, LV 3	CUIS 49066	3.00008	Bone, uid fragments	12	3.8
EU 1	Zone B, LV 3	CUIS 49067	3.00009	Bone, uid vertebra	1	0.1
EU 1	Zone B, LV 3	CUIS 49068	3.0001	Nail, machine cut	1	2.2
EU 1	Zone B, LV 4	CUIS 49069	4.00001	Uid-stamped, sand-tempered pottery	1	9.1
EU 1	Zone B, LV 4	CUIS 49070	4.00002	Plain, sand-tempered pottery	3	7.6
EU 1	Zone B, LV 4	CUIS 49071	4.00003	Shell, whelk with possible extraction hole	1	80.3

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 1	Zone B, LV 4	CUIS 49072	4.00004	Shell, clam	1	80.8
EU 1	Zone B, LV 4	CUIS 49073	4.00005	Bone, uid fragments	4	2
EU 1	Zone B, LV 5	CUIS 49074	5.00001	Savannah Fine Cord Marked	1	6.1
EU 1	Zone B, LV 5	CUIS 49075	5.00002	Plain, sand-tempered pottery	6	17.1
EU 1	Zone B, LV 5	CUIS 49076	5.00003	Glass fragment, colorless	1	0.2
EU 1	Zone B, LV 5	CUIS 49077	5.00004	Nail, machine cut	1	10.9
EU 1	Zone B, LV 5	CUIS 49078	5.00005	Shell, whelk with possible extraction hole	1	67.2
EU 1	Zone B, LV 5	CUIS 49079	5.00006	Bone, uid fragments	16	6.6
EU 1	Zone B, LV 6	CUIS 49080	6.00001	Saint Johns Plain	2	23.1
EU 1	Zone B, LV 6	CUIS 49081	6.00002	Plain, sand-tempered pottery, rim	1	4.3
EU 1	Zone B, LV 6	CUIS 49082	6.00003	Deptford Simple Stamped	2	7.8
EU 1	Zone B, LV 6	CUIS 49083	6.00004	Deptford Check Stamped	1	14.8
EU 1	Zone B, LV 6	CUIS 49084	6.00005	Plain, sand/grit-tempered pottery	1	4
EU 1	Zone B, LV 6	CUIS 49085	6.00006	Iron concretion	1	10.9
EU 1	Zone B, LV 6	CUIS 49086	6.00007	Bone, uid long bone, mammal	1	7.1
EU 1	Zone B, LV 6	CUIS 49087	6.00008	Bone, uid turtle carapace	3	1.4
EU 1	Zone B, LV 6	CUIS 49088	6.00009	Bone, uid fragments	6	2.7
EU 1	Zone B, LV 6	CUIS 49089	6.0001	Bone, possible osteichthyes spine fragment	1	0.3
EU 1	Zone B, LV 7	CUIS 49090	7.00001	Uid-stamped, sand-tempered pottery	1	1.1
EU 1	Zone B, LV 7	CUIS 49091	7.00002	Uid-cord-marked, sand-tempered pottery	1	2.9
EU 1	Zone B, LV 7	CUIS 49092	7.00003	Plain, sand-tempered pottery	4	4.6
EU 1	Zone B, LV 7	CUIS 49093	7.00004	Charcoal	1	0.2
EU 1	Zone B, LV 7	CUIS 49094	7.00005	Bone, uid fragments	13	4.2
EU 1	Zone B, LV 7	CUIS 49095	7.00006	Bone, uid mammal tooth	1	0.3
EU 1	Zone B, LV 7	CUIS 49096	7.00007	Bone, uid turtle carapace	2	3.4
EU 1	Zone B, LV 7	CUIS 49097	7.00008	Bone, uid vertebra	4	0.4
EU 1	Zone B, LV 7	CUIS 49098	7.00009	Bone, osteichthyes dorsal spine	1	0.2
EU 1	Zone B, LV 7	CUIS 49099	7.0001	Bone, osteichthyes bone fragments	2	0.2
EU 1	Zone C, LV 8	CUIS 49100	8.00001	Red-filmed, sand-tempered pottery	2	2.9
EU 1	Zone C, LV 8	CUIS 49101	8.00002	Bone, uid fragment	1	1
EU 2	Zone A, LV 1	CUIS 49102	9.00001	Container glass, olive green	3	2
EU 2	Zone A, LV 1	CUIS 49103	9.00002	Container glass, amber	1	0.7
EU 2	Zone A, LV 1	CUIS 49104	9.00003	Metal, uid fragment	1	0.3
EU 2	Zone A, LV 1	CUIS 49105	9.00004	Slate, gray	1	0.2
EU 2	Zone A, LV 1	CUIS 49106	9.00005	Brick fragments	6	2.5
EU 2	Zone A, LV 1	CUIS 49107	9.00006	Slag	1	4.2
EU 2	Zone A, LV 1	CUIS 49108	9.00007	Coal	17	16.4
EU 2	Zone A, LV 1	CUIS 49109	9.00008	Bone, uid fragments, burned	3	4
EU 2	Zone A, LV 1	CUIS 49110	9.00009	Bone, terraodonitae grinding plate, fossilized	1	0.4
EU 2	Zone A, LV 1	CUIS 49111	9.0001	Bone, sting ray spine fragments, fossilized	2	0.6
EU 2	Zone A, LV 1	CUIS 49112	9.00011	Shark teeth, fossilized	22	6.7
EU 2	Zone A, LV 1	CUIS 49113	9.00012	Drum teeth, fossilized	2	0.5
EU 2	Zone A, LV 1	CUIS 49114	9.00013	Bone, uid fragments	3	0.5

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 2	Zone A, LV 2	CUIS 49115	10.00001	Pearlware, handpainted	1	1.5
EU 2	Zone A, LV 2	CUIS 49116	10.00002	Whiteware	1	0.5
EU 2	Zone A, LV 2	CUIS 49117	10.00003	Uld stamped, sand/grit-tempered pottery	1	6.8
EU 2	Zone A, LV 2	CUIS 49118	10.00004	Plain, sand-tempered pottery	1	1.1
EU 2	Zone A, LV 2	CUIS 49119	10.00005	Savannah Fine-Cord Marked	1	3.3
EU 2	Zone A, LV 2	CUIS 49120	10.00006	Container glass, olive green	1	0.6
EU 2	Zone A, LV 2	CUIS 49121	10.00007	Charcoal	5	12.5
EU 2	Zone A, LV 2	CUIS 49122	10.00008	Slate, gray	1	3.3
EU 2	Zone A, LV 2	CUIS 49123	10.00009	Shark teeth, fossilized	17	5.7
EU 2	Zone A, LV 2	CUIS 49124	10.0001	Bone, sting ray spine fragment, fossilized	1	0.5
EU 2	Zone A, LV 2	CUIS 49125	10.00011	Shell, whelk	1	13.7
EU 2	Zone A, LV 2	CUIS 49126	10.00012	Shell, uid fragments	3	3.7
EU 2	Zone A, LV 2	CUIS 49127	10.00013	Shell, oyster	2	13.6
EU 2	Zone A, LV 2	CUIS 49128	10.00014	Drum teeth	2	0.4
EU 2	Zone A, LV 2	CUIS 49129	10.00015	Iron concretion	1	3
EU 2	Zone A, LV 3	CUIS 49130	11.00001	Deptford Check Stamped	2	18.7
EU 2	Zone A, LV 3	CUIS 49131	11.00002	Plain, sand-tempered pottery	4	7.1
EU 2	Zone A, LV 3	CUIS 49132	11.00003	Plain, sand/grit-tempered pottery	2	2.1
EU 2	Zone A, LV 3	CUIS 49133	11.00004	Glass, fragment, patinated	1	5.4
EU 2	Zone A, LV 3	CUIS 49134	11.00005	Glass, fragment, blue	1	0.3
EU 2	Zone A, LV 3	CUIS 49135	11.00006	Flat glass, colorless	2	0.9
EU 2	Zone A, LV 3	CUIS 49136	11.00007	Metal, uid fragments	5	9.7
EU 2	Zone A, LV 3	CUIS 49137	11.00008	Nail, machine cut, fragments	7	22.4
EU 2	Zone A, LV 3	CUIS 49138	11.00009	Slate, gray	7	45.9
EU 2	Zone A, LV 3	CUIS 49139	11.0001	Brick fragments	4	7.5
EU 2	Zone A, LV 3	CUIS 49140	11.00011	Coal	5	5.9
EU 2	Zone A, LV 3	CUIS 49141	11.00012	Shell, uid fragments	4	3.2
EU 2	Zone A, LV 3	CUIS 49142	11.00013	Shell, uid fragment	1	21.5
EU 2	Zone A, LV 3	CUIS 49143	11.00014	Shell, whelk	2	54.8
EU 2	Zone A, LV 3	CUIS 49144	11.00015	Bone, uid, fragment	1	0.6
EU 2	Zone A, LV 3	CUIS 49145	11.00016	Bone, uid otolith	1	1
EU 2	Zone A, LV 3	CUIS 49146	11.00017	Bone, uid fragments	13	6.2
EU 2	Zone B, LV 4	CUIS 49147	12.00001	Whiteware rim	1	2.4
EU 2	Zone B, LV 4	CUIS 49148	12.00002	Uld Punctated, sand-tempered pottery, rim	1	3.8
EU 2	Zone B, LV 4	CUIS 49149	12.00003	Terracota	2	7.2
EU 2	Zone B, LV 4	CUIS 49150	12.00004	Deptford Complicated Stamped	2	23.6
EU 2	Zone B, LV 4	CUIS 49151	12.00005	Uld check-stamped, sand-tempered pottery	2	4.7
EU 2	Zone B, LV 4	CUIS 49152	12.00006	Plain, grog-tempered pottery	1	2.6
EU 2	Zone B, LV 4	CUIS 49153	12.00007	Plain, sand-tempered pottery	13	38.7
EU 2	Zone B, LV 4	CUIS 49154	12.00008	Uld-stamped, sand-tempered pottery	1	12.4
EU 2	Zone B, LV 4	CUIS 49155	12.00009	Brick fragments	3	6.2
EU 2	Zone B, LV 4	CUIS 49156	12.0001	Slate, gray	3	14.2
EU 2	Zone B, LV 4	CUIS 49157	12.00011	Bone, uid fragments	7	7.2
EU 2	Zone B, LV 4	CUIS 49158	12.00012	Shell, uid fragments	1	0.7

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 2	Zone B, LV 4	CUIS 49159	12.00013	St. John's Simple Stamped	1	4.3
EU 2	Zone B, LV 5	CUIS 49160	13.00001	Plain, sand/grit-tempered pottery	3	68.4
EU 2	Zone B, LV 5	CUIS 49161	13.00002	Uld-stamped, sand-tempered pottery	8	30.2
EU 2	Zone B, LV 5	CUIS 49162	13.00003	Plain, grog temper	1	21.5
EU 2	Zone B, LV 5	CUIS 49163	13.00004	Cord-marked, sand-tempered pottery	1	3.1
EU 2	Zone B, LV 5	CUIS 49164	13.00005	Check-stamped, sand-tempered pottery, rim	1	3.6
EU 2	Zone B, LV 5	CUIS 49165	13.00006	Deptford Check Stamped	7	20.8
EU 2	Zone B, LV 5	CUIS 49166	13.00007	Plain, sand-tempered pottery, rims	4	10.2
EU 2	Zone B, LV 5	CUIS 49167	13.00008	Plain, sand-tempered pottery	83	109.5
EU 2	Zone B, LV 5	CUIS 49168	13.00009	Glass fragment	1	0.4
EU 2	Zone B, LV 5	CUIS 49169	13.0001	Container glass, olive green	1	0.4
EU 2	Zone B, LV 5	CUIS 49170	13.00011	Metal, uid fragment	1	0.4
EU 2	Zone B, LV 5	CUIS 49171	13.00012	Slag	1	0.3
EU 2	Zone B, LV 5	CUIS 49172	13.00013	Bone, uid fragments	74	19.4
EU 2	Zone B, LV 5	CUIS 49173	13.00014	Charcoal	50	4.8
EU 2	Zone B, LV 5	CUIS 49174	13.00015	Shell, whelk	2	124.1
EU 2	Zone B, LV 5	CUIS 49175	13.00016	Shell, uid	1	0.1
EU 2	Zone B, LV 5	CUIS 49176	13.00017	Shell, uid fragments	7	5.6
EU 2	Zone B, LV 5	CUIS 49177	13.00018	Bone, uid turtle carapace	6	3.1
EU 2	Zone B, LV 5	CUIS 49178	13.00019	Bone, uid turtle carapace	1	0.3
EU 2	Zone B, LV 5	CUIS 49179	13.0002	Bone, uid vertebra	6	0.5
EU 2	Zone B, LV 5	CUIS 49180	13.00021	Shell, uid	2	1.3
EU 2	Zone B, LV 5	CUIS 49181	13.00022	Drum tooth	1	0.1
EU 2	Zone B, LV 5	CUIS 49182	13.00023	Mortar	4	1.8
EU 2	Zone B, LV 5	CUIS 49183	13.00024	Chert flake	1	0.1
EU 2	Zone B, LV 5	CUIS 49184	13.00025	Bone, osteichthyes dorsal spine	1	0.7
EU 2	Zone B, LV 5	CUIS 49185	13.00026	Bone, metacarpal or metatarsal	1	0.1
EU 2	Zone B, LV 5	CUIS 49186	13.00027	Bone, uid osteichthyes (bony fish, fragment)	4	0.8
EU 2	Zone B, LV 5	CUIS 49187	13.00028	Bone, uid, fragments	2	0.2
EU 2	Zone B, LV 5	CUIS 49188	13.00029	Bone, osteichthyes pectoral spine	1	0.1
EU 2	Zone B, LV 6	CUIS 49189	14.00001	Uld-stamped, sand-tempered pottery	6	19.6
EU 2	Zone B, LV 6	CUIS 49190	14.00002	Plain, sand-tempered rims	2	3.5
EU 2	Zone B, LV 6	CUIS 49191	14.00003	Deptford Check Stamped	2	7.4
EU 2	Zone B, LV 6	CUIS 49192	14.00004	Plain, sand-tempered pottery	18	45.4
EU 2	Zone B, LV 6	CUIS 49193	14.00005	Shell (Polinices duplicatus)	1	16.7
EU 2	Zone B, LV 6	CUIS 49194	14.00006	Shell, uid fragments	5	2.2
EU 2	Zone B, LV 6	CUIS 49195	14.00007	Bone, uid fragments	20	6.5
EU 2	Zone B, LV 6	CUIS 49196	14.00008	Charcoal	32	4
EU 2	Zone B, LV 6	CUIS 49197	14.00009	Bone, uid	1	1.9
EU 2	Zone B, LV 6	CUIS 49198	14.0001	Tooth, uid	1	0.2
EU 2	Zone B, LV 6	CUIS 49199	14.00011	Bone, uid vertebra	3	0.2
EU 2	Zone B, LV 7	CUIS 49200	15.00001	Deptford Check Stamped	1	11.5
EU 2	Zone B, LV 7	CUIS 49201	15.00002	Plain, sand-tempered pottery, rim	1	5.3
EU 2	Zone B, LV 7	CUIS 49202	15.00003	Plain, sand-tempered pottery	13	18.1
EU 2	Zone B, LV 7	CUIS 49203	15.00004	Uld-stamped, sand-tempered pottery	2	37.1

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 2	Zone B, LV 7	CUIS 49204	15.00005	Bone, uid fragments	22	2.9
EU 2	Zone B, LV 7	CUIS 49205	15.00006	Bone, uid otolith	1	1.3
EU 2	Zone B, LV 7	CUIS 49206	15.00007	St. John's Plain	1	10.4
EU 2	Zone B, LV 7	CUIS 49207	15.00008	Bone, uid vertebra	4	0.5
EU 2	Zone C, LV 8	CUIS 49208	16.00001	Plain, sand-tempered pottery	9	3.1
EU 2	Zone C, LV 8	CUIS 49209	16.00002	Plain, grog-tempered pottery	1	1.7
EU 2	Zone C, LV 8	CUIS 49210	16.00003	Bone, uid, fragments	10	1.8
EU 2	Zone C, LV 8	CUIS 49211	16.00004	Charcoal	28	2.2
EU 3	Zone A, LV 1	CUIS 49212	17.00001	St. Johns Plain	1	4.7
EU 3	Zone A, LV 1	CUIS 49213	17.00002	Brick fragments	2	4.9
EU 3	Zone A, LV 1	CUIS 49214	17.00003	Mortar	1	11
EU 3	Zone A, LV 2	CUIS 49215	18.00001	Plain, grog-tempered pottery	1	5.8
EU 3	Zone A, LV 2	CUIS 49216	18.00002	Uid-stamped, sand-tempered pottery	1	7.3
EU 3	Zone A, LV 2	CUIS 49217	18.00003	Pearlware, blue, transfer print , rim	1	2.7
EU 3	Zone A, LV 2	CUIS 49218	18.00004	Glass fragment	1	1.3
EU 3	Zone A, LV 2	CUIS 49219	18.00005	Container glass, olive green	1	1.4
EU 3	Zone A, LV 2	CUIS 49220	18.00006	Container glass, light blue-green	1	0.9
EU 3	Zone A, LV 2	CUIS 49221	18.00007	Glass, amber, fragment	1	0.6
EU 3	Zone A, LV 2	CUIS 49222	18.00008	Container glass, colorless rim	1	1.7
EU 3	Zone A, LV 2	CUIS 49223	18.00009	Metal, uid, fragment	1	1.7
EU 3	Zone A, LV 2	CUIS 49224	18.0001	Brick fragments	11	13.5
EU 3	Zone A, LV 2	CUIS 49225	18.00011	Slate, red	4	7.8
EU 3	Zone A, LV 2	CUIS 49226	18.00012	Slate, gray	1	2.5
EU 3	Zone A, LV 2	CUIS 49227	18.00013	Granite	1	168.9
EU 3	Zone A, LV 2	CUIS 49228	18.00014	Coal	13	12.5
EU 3	Zone A, LV 2	CUIS 49229	18.00015	Slag	1	5.7
EU 3	Zone A, LV 3	CUIS 49230	19.00001	Plain, sand-tempered pottery	2	5.4
EU 3	Zone A, LV 3	CUIS 49231	19.00002	Pearlware, blue, transfer print	1	1.6
EU 3	Zone A, LV 3	CUIS 49232	19.00003	Glass, colorless, fragment	1	1.6
EU 3	Zone A, LV 3	CUIS 49233	19.00004	Slate, red	6	82.2
EU 3	Zone A, LV 3	CUIS 49234	19.00005	Shell, whelk with extraction hole	1	130
EU 3	Zone B, LV 4	CUIS 49235	20.00001	Shell, oyster	6	124.3
EU 3	Zone B, LV 5	CUIS 49236	21.00001	Plain, sand-tempered pottery	5	28.8
EU 3	Zone B, LV 5	CUIS 49237	21.00002	Savannah Fine Cord Marked	1	11.6
EU 3	Zone B, LV 5	CUIS 49238	21.00003	Bone, uid fragment, burned	1	2
EU 3	Zone B, LV 5	CUIS 49239	21.00004	Bone, uid mammal	1	42.4
EU 3	Zone B, LV 5	CUIS 49240	21.00005	Bone, uid fragments	3	2.4
EU 3	Zone B, LV 6	CUIS 49241	22.00001	Uid-stamped, sand-tempered pottery	1	9.3
EU 3	Zone B, LV 6	CUIS 49242	22.00002	Plain, sand-tempered pottery rim	1	19.4
EU 3	Zone B, LV 6	CUIS 49243	22.00003	Plain, sand-tempered pottery	2	16.4
EU 3	Zone B, LV 6	CUIS 49244	22.00004	Bone, uid fragments	43	23.1
EU 3	Zone B, LV 6	CUIS 49245	22.00005	Bone, uid teeth	6	5.9
EU 3	Zone B, LV 6	CUIS 49246	22.00006	Bone, uid jaw bone with intact tooth	1	5.2
EU 3	Zone B, LV 6	CUIS 49247	22.00007	Shell, uid fragments	8	7.5
EU 3	Zone B, LV 6	CUIS 49248	22.00008	Bone, uid vertebra	5	1.5
EU 3	Zone B, LV 6	CUIS 49249	22.00009	Bone, uid fragments, mammal	7	25.9
EU 3	Zone B, LV 6	CUIS 49250	22.0001	Bone, uid turtle carapace fragment	1	0.1

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 3	Zone B, LV 6	CUIS 49251	22.00011	Bone, uid fragments	2	1.4
EU 3	Zone B, LV 6	CUIS 49252	22.00012	Bone, turtle longbone fragment	1	1.9
EU 3	Zone B, LV 6	CUIS 49253	22.00013	Bone, longbone fragment	1	0.1
EU 3	Zone B, LV 6	CUIS 49254	22.00014	Bone, aves longbone fragment	1	0.9
EU 3	Zone B, LV 6	CUIS 49255	22.00015	Bone, osteichthyes dorsal spine	1	0.6
EU 3	Zone B, LV 7	CUIS 49256	23.00001	Deptford Check Stamped	1	4.5
EU 3	Zone B, LV 7	CUIS 49257	23.00002	Plain, sand-tempered pottery	2	4.6
EU 3	Zone B, LV 7	CUIS 49258	23.00003	Tack, iron	1	1.1
EU 3	Zone B, LV 7	CUIS 49259	23.00004	Bone, uid fragments	24	26.5
EU 3	Zone C, LV 8	CUIS 49260	24.00001	Deptford Check Stamped	1	4.3
EU 3	Zone C, LV 8	CUIS 49261	24.00002	Uid-stamped, grog-tempered pottery	1	4.1
EU 3	Zone C, LV 8	CUIS 49262	24.00003	Plain, sand-tempered pottery	3	3
EU 3	Zone C, LV 8	CUIS 49263	24.00004	Nail, machine cut nail	1	1.6
EU 3	Zone C, LV 8	CUIS 49264	24.00005	Nail, wrought iron, fragments	1	3.2
EU 3	Zone C, LV 8	CUIS 49265	24.00006	Bone, uid fragment	9	6.7
EU 3	Zone C, LV 8	CUIS 49266	24.00007	Bone, uid vertebra	1	0.1
EU 3	Zone C, LV 8	CUIS 49267	24.00008	Bone, osteichthyes pectoral spine	1	0.2
ST 19	Eastside	CUIS 49611	78.00001	Plain, sand/grit-tempered pottery	1	7.6
ST 19	Eastside	CUIS 49612	78.00002	Plain, sand-tempered pottery	1	1.1
ST 19	Eastside	CUIS 49613	78.00003	Pearlware, blue transfer-print	1	1.7
ST 19	Eastside	CUIS 49614	78.00004	Creamware	1	1.5
ST 19	Eastside	CUIS 49615	78.00005	Mortar	2	3.9
ST 19	Eastside	CUIS 49616	78.00006	Metal, uid hardware	1	22.7
ST 19	Eastside	CUIS 49617	78.00007	Nail, uid fragments	3	6.2
ST 18	Westside	CUIS 49618	79.00001	Plain, sand-tempered pottery	1	6.4
ST 18	Westside	CUIS 49619	79.00002	Container glass, olive green	1	1.1
ST 18	Westside	CUIS 49620	79.00003	Flat glass, colorless fragments	6	3
ST 18	Westside	CUIS 49621	79.00004	Container glass, colorless	1	1.8
ST 18	Westside	CUIS 49622	79.00005	Brick fragments	20	86.9
ST 18	Westside	CUIS 49623	79.00006	Mortar	4	10
ST 18	Westside	CUIS 49624	79.00007	Nail, uid fragments	2	12.9
ST 18	Westside	CUIS 49625	79.00008	Metal, uid fragments	3	13.3
ST 18	Westside	CUIS 49626	79.00009	Slag	2	2.1
ST 18	Westside	CUIS 49627	79.0001	Coal	1	4.1
ST 01	370E, 462N	CUIS 50043	166.00001	Plain, sand-tempered pottery	2	5.8
ST 01	370E, 462N	CUIS 50044	166.00002	Flat glass, colorless fragment	1	0.4
ST 01	370E, 462N	CUIS 50045	166.00003	Nail, uid fragments	2	2.4
ST 01	370E, 462N	CUIS 50046	166.00004	Bone, uid fragments	4	1.4
ST 01	370E, 462N	CUIS 50047	166.00005	Charcoal	1	0.9
ST 02	390E, 462N	CUIS 50048	167.00001	Uid Check-stamped, stand-tempered pottery	2	7.8
ST 02	390E, 462N	CUIS 50049	167.00002	Plain, sand-tempered pottery	1	2.8
ST 02	390E, 462N	CUIS 50050	167.00003	Bone, uid fragments	2	1.2
ST 02	390E, 462N	CUIS 50051	167.00004	Coal	4	8.3
ST 02	390E, 462N	CUIS 50052	167.00005	Granite	1	26.3
ST 03	390E, 480N	CUIS 50053	168.00001	Deptford Cord Marked	4	58.4
ST 03	390E, 480N	CUIS 50054	168.00002	Plain, sand-tempered pottery	3	2

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 03	390E, 480N	CUIS 50055	168.00003	Plain, sand/grog tempered pottery	1	3.8
ST 03	390E, 480N	CUIS 50056	168.00004	Glass, blue, shell-patteren	1	1.6
ST 03	390E, 480N	CUIS 50057	168.00005	Container glass, olive-green	2	2.5
ST 03	390E, 480N	CUIS 50058	168.00006	Nail, uid fragment	1	4.6
ST 03	390E, 480N	CUIS 50059	168.00007	Bone, uid fragments	5	3.6
ST 03	390E, 480N	CUIS 50060	168.00008	Bone, uid tooth	1	1.6
ST 03	390E, 480N	CUIS 50061	168.00009	Coal	15	10.3
ST 04	410E, 462N	CUIS 50062	169.00001	Plain, fiber-tempered pottery	4	4.2
ST 04	410E, 462N	CUIS 50063	169.00002	Plain, sand-tempered pottery rim and body	4	35.3
ST 04	410E, 462N	CUIS 50064	169.00003	Plain, sand-tempered pottery	13	20.3
ST 04	410E, 462N	CUIS 50065	169.00004	Nail, wrought iron fragments	3	8.1
ST 04	410E, 462N	CUIS 50066	169.00005	Bone, uid fragments	35	11
ST 04	410E, 462N	CUIS 50067	169.00006	Bone, uid tooth	1	0.4
ST 04	410E, 462N	CUIS 50068	169.00007	Bone, uid long bone,	1	2.2
ST 04	410E, 462N	CUIS 50069	169.00008	Bone, uid turtle carapace	2	1.6
ST 04	410E, 462N	CUIS 50070	169.00009	Slate, red	1	4.8
ST 04	410E, 462N	CUIS 50071	169.0001	Bone, uid turtle, fragments	3	9.1
ST 04	410E, 462N	CUIS 50072	169.00011	Bone, aves longbone, fragments	4	4.7
ST 05	410E, 480N	CUIS 50073	170.00001	Uid Check-stamped, stand-tempered pottery	1	2.2
ST 05	410E, 480N	CUIS 50074	170.00002	Plain, sand-tempered pottery	9	31.8
ST 05	410E, 480N	CUIS 50075	170.00003	Plain, fiber-tempered pottery	1	7.7
ST 05	410E, 480N	CUIS 50076	170.00004	Pearlware, blue transfer print, rims	3	4.3
ST 05	410E, 480N	CUIS 50077	170.00005	Glass, colorless, fragment	1	0.9
ST 05	410E, 480N	CUIS 50078	170.00006	Glass, patinated	1	8.6
ST 05	410E, 480N	CUIS 50079	170.00007	Glass, colorless, fragments	4	2.2
ST 05	410E, 480N	CUIS 50080	170.00008	Nail, machine cut	1	8.5
ST 05	410E, 480N	CUIS 50081	170.00009	Nail, machine cut fragments	2	8.2
ST 05	410E, 480N	CUIS 50082	170.0001	Nail, uid fragment	1	1.4
ST 05	410E, 480N	CUIS 50083	170.00011	Brick fragments	6	10.4
ST 05	410E, 480N	CUIS 50084	170.00012	Bone, uid fragment	1	0.3
ST 05	410E, 480N	CUIS 50085	170.00013	Coal	2	1.4
ST 05	410E, 480N	CUIS 50086	170.00014	Limestone	1	4.9
ST 06	450E, 462N	CUIS 50087	171.00001	Plain, sand-tempered pottery	3	8.6
ST 06	450E, 462N	CUIS 50088	171.00002	Uid-stamped, sand/grit-tempered pottery	1	8
ST 06	450E, 462N	CUIS 50089	171.00003	Bone, uid fragment	1	0.2
ST 06	450E, 462N	CUIS 50090	171.00004	Charcoal	1	2.8
ST 07	450E, 480N	CUIS 50091	172.00001	Uid Cord-marked, sand/grit-tempered pottery	1	4.4
ST 07	450E, 480N	CUIS 50092	172.00002	Plain, sand-tempered pottery	4	6.8
ST 07	450E, 480N	CUIS 50093	172.00003	Plain, sand/grit-tempered pottery	1	2.1
ST 07	450E, 480N	CUIS 50094	172.00004	Container glass, olive-green	1	0.8
ST 07	450E, 480N	CUIS 50095	172.00005	Container glass, olive green	1	2.2
ST 07	450E, 480N	CUIS 50096	172.00006	Glass, colorless, fragment	1	0.3
ST 07	450E, 480N	CUIS 50097	172.00007	Glass fragment	1	0.3
ST 07	450E, 480N	CUIS 50098	172.00008	Bone, uid fragments	6	3.8

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 07	450E, 480N	CUIS 50099	172.00009	Granite	1	1.1
ST 08	490E, 462N	CUIS 50100	173.00001	Plain, sand-tempered pottery	1	4.2
ST 08	490E, 462N	CUIS 50101	173.00002	Container glass, olive-green	1	0.9
ST 08	490E, 462N	CUIS 50102	173.00003	Bone, uid fragments	3	3.1
ST 08	490E, 462N	CUIS 50103	173.00004	Coal	5	6.7
ST 09	500E, 440N	CUIS 50104	174.00001	Deptford Linear Check Stamped	3	31.7
ST 09	500E, 440N	CUIS 50105	174.00002	Uid Cord-marked, grog-tempered pottery	1	2.5
ST 09	500E, 440N	CUIS 50106	174.00003	Plain, grog-tempered pottery	1	2.3
ST 09	500E, 440N	CUIS 50107	174.00004	Plain, sand-tempered pottery	1	15.3
ST 10	500E, 460N	CUIS 50108	175.00001	Plain, grog-tempered pottery	4	7.1
ST 10	500E, 460N	CUIS 50109	175.00002	Plain, sand-tempered pottery, rim	1	14.2
ST 10	500E, 460N	CUIS 50110	175.00003	Plain, sand-tempered pottery	5	11.2
ST 10	500E, 460N	CUIS 50111	175.00004	Brick fragments	6	9.3
ST 10	500E, 460N	CUIS 50112	175.00005	Bone, uid bone fragments	12	5.4
ST 10	500E, 460N	CUIS 50113	175.00006	Shell, oyster	1	10.2
ST 10	500E, 460N	CUIS 50114	175.00007	Shell, uid fragments	3	7.8
ST 10	500E, 460N	CUIS 50115	175.00008	Granite	7	243.7
ST 11	500E, 480N	CUIS 50116	176.00001	Plain, sand-tempered pottery	3	9.5
ST 11	500E, 480N	CUIS 50117	176.00002	Bone, uid fragments	5	1
ST 11	500E, 480N	CUIS 50118	176.00003	Slate, red	1	12.1
ST 12	500E, 490N	CUIS 50119	177.00001	Uid-stamped, sand-tempered pottery	1	0.8
ST 12	500E, 490N	CUIS 50120	177.00002	Plain, sand-tempered pottery	5	14
ST 12	500E, 490N	CUIS 50121	177.00003	Container glass, olive-green	1	0.6
ST 12	500E, 490N	CUIS 50122	177.00004	Glass, colorless fragment	1	0.3
ST 12	500E, 490N	CUIS 50123	177.00005	Nail, uid fragment	2	2.4
ST 12	500E, 490N	CUIS 50124	177.00006	Bone, uid fragment	1	0.4
ST 12	500E, 490N	CUIS 50125	177.00007	Shell, whelk	1	16.3
ST 12	500E, 490N	CUIS 50126	177.00008	Slate, gray	17	60.6
ST 13	520E, 480N	CUIS 50127	178.00001	Plain, grog-tempered pottery	2	15.1
ST 13	520E, 480N	CUIS 50128	178.00002	Brick fragment	1	1.2
ST 13	520E, 480N	CUIS 50129	178.00003	Shell, whelk	1	9.6
ST 13	520E, 480N	CUIS 50130	178.00004	Bone, uid fragment	1	0.3
ST 13	520E, 480N	CUIS 50131	178.00005	Slate, gray	1	7.1
ST 14	530E, 462N	CUIS 50132	179.00001	Plain, sand-tempered pottery	2	13.9
ST 14	530E, 462N	CUIS 50133	179.00002	St. Johns Check Stamped	1	2.5
ST 14	530E, 462N	CUIS 50134	179.00003	Glass, colorless fragment	1	2.4
ST 14	530E, 462N	CUIS 50135	179.00004	Bone, uid fragments	6	2
ST 14	530E, 462N	CUIS 50136	179.00005	Charcoal	2	2.9
ST 15	530E, 480N	CUIS 50137	180.00001	St. Johns Check Stamped	4	20.8
ST 15	530E, 480N	CUIS 50138	180.00002	Uid Cord-marked, sand-tempered pottery	1	1.5
ST 15	530E, 480N	CUIS 50139	180.00003	Plain, sand-tempered pottery	2	3.5
ST 15	530E, 480N	CUIS 50140	180.00004	Glass, light green-blue, fragment	1	0.4
ST 15	530E, 480N	CUIS 50141	180.00005	Nail, uid fragment	1	5.8
ST 15	530E, 480N	CUIS 50142	180.00006	Brick fragments	2	0.5
ST 16	540E, 480N	CUIS 50143	181.00001	Uid-stamped, sand/grit-tempered	5	19.4

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 16	540E, 480N	CUIS 50144	181.00002	pottery, Plain, sand-tempered pottery	5	11.3
ST 16	540E, 480N	CUIS 50145	181.00003	Nail, uid fragments	2	6.9
ST 16	540E, 480N	CUIS 50146	181.00004	Shell, oyster	1	10.6
ST 16	540E, 480N	CUIS 50147	181.00005	Slate, gray	2	1.8
ST 17	550E, 462N	CUIS 50148	182.00001	Plain, grog-tempered pottery	1	3.6
ST 17	550E, 462N	CUIS 50149	182.00002	Plain, sand-tempered pottery	6	19.9
ST 17	550E, 462N	CUIS 50150	182.00003	Brick fragments	7	25.1
ST 17	550E, 462N	CUIS 50151	182.00004	Nail, machine wire	1	1.1
ST 17	550E, 462N	CUIS 50152	182.00005	Nail, machine cut	1	1.4
ST 17	550E, 462N	CUIS 50153	182.00006	Staple, wire	1	1.2
ST 17	550E, 462N	CUIS 50154	182.00007	Bone, uid fragments	5	1.5
ST 17	550E, 462N	CUIS 50155	182.00008	Coal	1	1.9

Appendix 2

Collections From the Main Road (1902.02)

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 01	525E, 450N	CUIS 49268	25.00001	Creamware	2	2.3
ST 01	525E, 450N	CUIS 49269	25.00002	Container glass, colorless	1	3.1
ST 01	525E, 450N	CUIS 49270	25.00003	Nail, uid fragments	3	6.5
ST 01	525E, 450N	CUIS 49271	25.00004	Nail, wrought iron, fragments	2	11.3
ST 02	525E, 460N	CUIS 49272	26.00001	Pearlware, blue transfer print	1	0.3
ST 02	525E, 460N	CUIS 49273	26.00002	Container glass, olive green	1	1.2
ST 02	525E, 460N	CUIS 49274	26.00003	Metal, uid fragment	1	0.5
ST 02	525E, 460N	CUIS 49275	26.00004	Brick fragment	1	2.6
ST 02	525E, 460N	CUIS 49276	26.00005	Mortar	2	8.9
ST 04	525E, 480N	CUIS 49277	27.00001	Pearlware, blue shell-edged rim	1	3.9
ST 04	525E, 480N	CUIS 49278	27.00002	Pearlware	1	2.6
ST 04	525E, 480N	CUIS 49279	27.00003	Pearlware base	1	3.7
ST 04	525E, 480N	CUIS 49280	27.00004	Porcelain, blue transferprint	1	0.6
ST 04	525E, 480N	CUIS 49281	27.00005	Creamware, handpainted	1	0.3
ST 04	525E, 480N	CUIS 49282	27.00006	Creamware	7	21.9
ST 04	525E, 480N	CUIS 49283	27.00007	Stoneware, salt-glazed	2	39.4
ST 04	525E, 480N	CUIS 49284	27.00008	Earthenware, glazed, rim	1	12.9
ST 04	525E, 480N	CUIS 49285	27.00009	Clay pipe bowl and stem fragment	1	4.3
ST 04	525E, 480N	CUIS 49286	27.0001	Earthenware, unglazed	4	11.7
ST 04	525E, 480N	CUIS 49287	27.00011	Brick fragments	7	15.1
ST 04	525E, 480N	CUIS 49288	27.00012	Mortar	1	44.1
ST 04	525E, 480N	CUIS 49289	27.00013	Container glass, olive green	4	13.6
ST 04	525E, 480N	CUIS 49290	27.00014	Glass, light green	3	0.4
ST 04	525E, 480N	CUIS 49291	27.00015	Container glass, light green	1	0.2
ST 04	525E, 480N	CUIS 49292	27.00016	Brass buckle	1	8.2
ST 04	525E, 480N	CUIS 49293	27.00017	Nail, machinecut, brass	1	2.6
ST 04	525E, 480N	CUIS 49294	27.00018	Nails, machine cut	10	55.1
ST 04	525E, 480N	CUIS 49295	27.00019	Nail, uid fragments	16	23.4
ST 04	525E, 480N	CUIS 49296	27.0002	Metal, uid object	1	26.3
ST 04	525E, 480N	CUIS 49297	27.00021	Uid fish scales	57	0.7
ST 04	525E, 480N	CUIS 49298	27.00022	Bone, uid fragments	9	8.2
ST 04	525E, 480N	CUIS 49299	27.00023	Bone, uid tooth	1	4.5
ST 04	525E, 480N	CUIS 49300	27.00024	Bone, uid fragment, burned	1	0.8
ST 04	525E, 480N	CUIS 49301	27.00025	Bone, possible bear phalange	1	10.9
ST 04	525E, 480N	CUIS 49302	27.00026	Slate, gray	1	0.7
ST 04	525E, 480N	CUIS 49303	27.00027	Iron hoe blade fragment	1	337.9
ST 05	525E, 490N	CUIS 49304	28.00001	Mortar	3	111.6
ST 06	525E, 500N	CUIS 49305	29.00001	Brick fragment	1	13.1
ST 06	525E, 500N	CUIS 49306	29.00002	Container glass, colorless	1	0.3
ST 07	525E, 510N	CUIS 49307	30.00001	Creamware rim	1	6
ST 07	525E, 510N	CUIS 49308	30.00002	Brick fragment	1	3.8
ST 07	525E, 510N	CUIS 49309	30.00003	Container glass, olive green	3	14.3
ST 07	525E, 510N	CUIS 49310	30.00004	Container glass, light olive green	1	0.6
ST 07	525E, 510N	CUIS 49311	30.00005	Glass, colorless, fragment, burned	1	2.9
ST 07	525E, 510N	CUIS 49312	30.00006	Nails, machine cut	2	13
ST 07	525E, 510N	CUIS 49313	30.00007	Metal, uid fragment	1	0.9

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 08	525E, 520N	CUIS 49314	31.00001	Container glass, olive green	1	6.3
ST 09	525E, 530N	CUIS 49315	32.00001	Earthenware, glazed	1	11.9
ST 09	525E, 530N	CUIS 49316	32.00002	Mortar	1	54.3
ST 09	525E, 530N	CUIS 49317	32.00003	Fulgurite	1	0.3
ST 10	525E, 542N	CUIS 49318	33.00001	Container glass, olive green	2	19.8
ST 10	525E, 542N	CUIS 49319	33.00002	Nail, wrought iron fragment	1	1.7
ST 11	525E, 550N	CUIS 49320	34.00001	Mortar	1	27.4
ST 11	525E, 550N	CUIS 49321	34.00002	Nail, uid fragments	4	14.6
ST 11	525E, 550N	CUIS 49322	34.00003	Metal, uid hardware	1	126.8
ST 12	525E, 560N	CUIS 49323	35.00001	Stoneware, salt-glazed	1	0.6
ST 12	525E, 560N	CUIS 49324	35.00002	Container glass, light green	1	0.3
ST 13	525E, 570N	CUIS 49325	36.00001	Earthenware, glazed, rim	1	3.5
ST 13	525E, 570N	CUIS 49326	36.00002	Creamware	1	0.8
ST 13	525E, 570N	CUIS 49327	36.00003	Mortar	2	7.1
ST 13	525E, 570N	CUIS 49328	36.00004	Metal, uid fragment	1	3.4
ST 14	525E, 580N	CUIS 49329	37.00001	Pearlware, blue transfer-print	1	0.9
ST 14	525E, 580N	CUIS 49330	37.00002	Nail, uid fragment	5	4.9
ST 14	525E, 580N	CUIS 49331	37.00003	Nail, wrought iron fragment	1	5.8
ST 15	525E, 590N	CUIS 49332	38.00001	Pearlware, blue shell-edged, rim	1	2.3
ST 15	525E, 590N	CUIS 49333	38.00002	Nail, machine cut	1	7
ST 15	525E, 590N	CUIS 49334	38.00003	Nail, uid fragments	14	17.5
ST 17	525E, 610N	CUIS 49335	39.00001	Container glass, olive green	5	13.9
ST 17	525E, 610N	CUIS 49336	39.00002	Shell, clam	1	37.2
ST 19	525E, 630N	CUIS 49337	40.00001	Container glass, olive green	1	0.3
ST 19	525E, 630N	CUIS 49338	40.00002	Mortar	1	10.6
ST 20	535E, 470N	CUIS 49339	41.00001	Container glass, dark olive green	1	3.7
ST 22	535E, 490N	CUIS 49340	42.00001	Glass, colorless fragment	1	0.2
ST 25	535E, 520N	CUIS 49341	43.00001	Pearlware, green shell-edged , rim	1	3.9
ST 26	535E, 530N	CUIS 49342	44.00001	Creamware	1	1.5
ST 26	535E, 530N	CUIS 49343	44.00002	Container glass, olive green	1	1.3
ST 26	535E, 530N	CUIS 49344	44.00003	Bone, uid fragment, burned	1	0.9
ST 27	535E, 540N	CUIS 49345	45.00001	Porcelain	1	0.3
ST 27	535E, 540N	CUIS 49346	45.00002	Container glass, olive green	1	0.6
ST 27	535E, 540N	CUIS 49347	45.00003	Glass, colorless fragment	1	1
ST 27	535E, 540N	CUIS 49348	45.00004	Metal, uid fragments	2	3.2
ST 28	535E, 550N	CUIS 49349	46.00001	Pearlware base	1	16.7
ST 28	535E, 550N	CUIS 49350	46.00002	Brick fragment	1	46.9
ST 28	535E, 550N	CUIS 49351	46.00003	Container glass, olive green	1	2.1
ST 28	535E, 550N	CUIS 49352	46.00004	Metal, uid fragment	1	0.8
ST 29	545E, 470N	CUIS 49353	47.00001	Flat glass, light blue/green	4	5.3
ST 29	545E, 470N	CUIS 49354	47.00002	Flat glass, clear	2	1.4
ST 30	545E, 480N	CUIS 49355	48.00001	Earthenware, blue transfer-print	1	0.6
ST 30	545E, 480N	CUIS 49356	48.00002	Container glass, olive green	1	0.3
ST 30	545E, 480N	CUIS 49357	48.00003	Tack, brass	1	0.6
ST 30	545E, 480N	CUIS 49358	48.00004	Nail, uid fragments	5	8.6
ST 30	545E, 480N	CUIS 49359	48.00005	Chert flake	1	0.1
ST 30	545E, 480N	CUIS 49360	48.00006	Shell, uid fragment	1	1.1

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 31	545E, 490N	CUIS 49361	49.00001	Brick fragments	5	50.5
ST 31	545E, 490N	CUIS 49362	49.00002	Metal, uid fragments	3	1.2
ST 32	545E, 500N	CUIS 49363	50.00001	Creamware rim	1	0.3
ST 32	545E, 500N	CUIS 49364	50.00002	Creamware	1	0.9
ST 32	545E, 500N	CUIS 49365	50.00003	Container glass, olive green	1	1.1
ST 32	545E, 500N	CUIS 49366	50.00004	Nail, uid fragment	1	0.6
ST 32	545E, 500N	CUIS 49367	50.00005	Metal, uid fragments	3	2.7
ST 32	545E, 500N	CUIS 49368	50.00006	Bone, uid tooth fragments	2	1.4
ST 32	545E, 500N	CUIS 49369	50.00007	Bone, uid fragment, burned	1	2.5
ST 33	545E, 510N	CUIS 49370	51.00001	Pearlware, blue shell-edged, rim	1	9.4
ST 33	545E, 510N	CUIS 49371	51.00002	Pearlware	1	2.1
ST 33	545E, 510N	CUIS 49372	51.00003	Annulareware	1	1.4
ST 33	545E, 510N	CUIS 49373	51.00004	Creamware base	1	9.1
ST 33	545E, 510N	CUIS 49374	51.00005	Container glass, olive green	3	5.4
ST 33	545E, 510N	CUIS 49375	51.00006	Brick fragments	2	40.7
ST 33	545E, 510N	CUIS 49376	51.00007	Mortar	1	6.1
ST 33	545E, 510N	CUIS 49377	51.00008	Nail, wrought iron, fragment	1	12.8
ST 33	545E, 510N	CUIS 49378	51.00009	Nail, uid fragments	4	5.2
ST 34	545E, 520N	CUIS 49379	52.00001	Pearlware, hand-painted	1	2
ST 34	545E, 520N	CUIS 49380	52.00002	Brick fragment	1	7.3
ST 34	545E, 520N	CUIS 49381	52.00003	Metal, uid fragments	6	8.6
ST 35	545E, 530N	CUIS 49382	53.00001	Pearlware, green shell-edged, rim	1	3
ST 35	545E, 530N	CUIS 49383	53.00002	Container glass, olive green	1	0.6
ST 35	545E, 530N	CUIS 49384	53.00003	Nail, uid fragments	6	7.1
ST 36	545E, 540N	CUIS 49385	54.00001	Creamware, hand-painted	1	0.5
ST 36	545E, 540N	CUIS 49386	54.00002	Annularware	2	3.1
ST 36	545E, 540N	CUIS 49387	54.00003	Creamware, banded, rim	1	0.6
ST 36	545E, 540N	CUIS 49388	54.00004	Creamware	1	0.4
ST 36	545E, 540N	CUIS 49389	54.00005	Brick fragments	2	51.1
ST 37	545E, 550N	CUIS 49390	55.00001	Pearlware	1	2.5
ST 38	545E, 560N	CUIS 49391	56.00001	Pearlware, green shell-edged , rim and body	3	6.8
ST 38	545E, 560N	CUIS 49392	56.00002	Creamware	1	1.5
ST 38	545E, 560N	CUIS 49393	56.00003	Earthenware, glazed	1	2.7
ST 38	545E, 560N	CUIS 49394	56.00004	Metal, uid fragment	1	11.9
ST 39	545E, 570N	CUIS 49395	57.00001	Pearlware, blue transfer print	1	0.6
ST 39	545E, 570N	CUIS 49396	57.00002	Pearlware, decorated	1	3.7
ST 39	545E, 570N	CUIS 49397	57.00003	Pearlware	1	2.6
ST 39	545E, 570N	CUIS 49398	57.00004	Pearlware, transfer print	1	1.4
ST 39	545E, 570N	CUIS 49399	57.00005	Creamware	2	0.5
ST 39	545E, 570N	CUIS 49400	57.00006	Annulareware	1	1.9
ST 39	545E, 570N	CUIS 49401	57.00007	Creamware base	1	1.7
ST 39	545E, 570N	CUIS 49402	57.00008	Earthenware, glazed	1	3.2
ST 39	545E, 570N	CUIS 49403	57.00009	Container glass, olive green	1	1.7
ST 39	545E, 570N	CUIS 49404	57.0001	Flat glass, light green/blue	1	0.7
ST 39	545E, 570N	CUIS 49405	57.00011	Nail, machine cut	1	8.9
ST 39	545E, 570N	CUIS 49406	57.00012	Shell, clam	1	26.6

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 39	545E, 570N	CUIS 49407	57.00013	Bone, uid fragment	1	0.9
ST 39	545E, 570N	CUIS 49408	57.00014	Bone, mandible with intact tooth, uid mammal	1	3.2
ST 40	480E, 581N	CUIS 49409	58.00001	Pearlware, blue transfer print	1	0.2
ST 42	480E, 600N	CUIS 49410	59.00001	Bone, uid turtle	4	22.7
ST 43	490E, 580N	CUIS 49411	60.00001	Container glass, olive green	1	0.6
ST 43	490E, 580N	CUIS 49412	60.00002	Nail, machine cut, fragment	1	2.4
ST 43	490E, 580N	CUIS 49413	60.00003	Metal, uid fragments	2	7.3
ST 45	490E, 590N	CUIS 49414	61.00001	Earthenware, glazed, rim with leaf print	1	2.6
ST 45	490E, 590N	CUIS 49415	61.00002	Brick fragments	6	320.1
ST 45	490E, 590N	CUIS 49416	61.00003	Container glass, light blue/green	1	1.3
ST 46	492E, 607N	CUIS 49417	62.00001	Brick fragments	2	86.5
ST 46	492E, 607N	CUIS 49418	62.00002	Mortar	2	299.3
ST 46	492E, 607N	CUIS 49419	62.00003	Nails, machine cut	5	43.8
ST 46	492E, 607N	CUIS 49420	62.00004	Nail, uid fragments	5	14.6
ST 46	492E, 607N	CUIS 49421	62.00005	Metal, uid fragments	1	58.7
EU 1	LV 1	CUIS 49422	63.00001	Pearlware, blue transfer-print	1	0.8
EU 1	LV 1	CUIS 49423	63.00002	Container glass, colorless	1	10
EU 1	LV 1	CUIS 49424	63.00003	Container glass, olive green	1	0.5
EU 1	LV 1	CUIS 49425	63.00004	Button, brass	1	2
EU 1	LV 1	CUIS 49426	63.00005	Nail, machine cut	1	4.6
EU 1	LV 1	CUIS 49427	63.00006	Nail, uid fragments	62	157.9
EU 1	LV 1	CUIS 49428	63.00007	Nail, wrought iron fragments	18	67.5
EU 1	LV 1	CUIS 49429	63.00008	Metal, uid fragments	5	8.9
EU 1	LV 1	CUIS 49430	63.00009	Mortar	3	433.3
EU 1	LV 1	CUIS 49431	63.0001	Bone, uid fragment	1	1.6
EU 1	LV 2	CUIS 49432	64.00001	Pearlware, green shell-edged, rim	1	2.3
EU 1	LV 2	CUIS 49433	64.00002	Annularware, rim	1	2.1
EU 1	LV 2	CUIS 49434	64.00003	Pearlware	1	2.7
EU 1	LV 2	CUIS 49435	64.00004	Creamware	2	2.5
EU 1	LV 2	CUIS 49436	64.00005	Container glass, olive green	2	9.4
EU 1	LV 2	CUIS 49437	64.00006	Glass, aqua, fragment	1	0.4
EU 1	LV 2	CUIS 49438	64.00007	Glass fragments	2	1.4
EU 1	LV 2	CUIS 49439	64.00008	Glass fragments	3	10.4
EU 1	LV 2	CUIS 49440	64.00009	Brick fragments	4	18.8
EU 1	LV 2	CUIS 49441	64.0001	Nails, machine cut	8	84
EU 1	LV 2	CUIS 49442	64.00011	Nail, uid fragments	2	7.3
EU 1	LV 2	CUIS 49443	64.00012	Metal, uid hardware	1	73.6
EU 1	LV 2	CUIS 49444	64.00013	Nail, wrought iron, fragments	11	45.9
EU 1	LV 2	CUIS 49445	64.00014	Nail, uid fragments	79	214.6
EU 1	LV 2	CUIS 49446	64.00015	Metal, uid fragments	20	119.3
EU 1	LV 2	CUIS 49447	64.00016	Uid fish scales	4	0.1
EU 1	LV 2	CUIS 49448	64.00017	Bone, uid mammal rib fragment	2	2.3
EU 1	LV 2	CUIS 49449	64.00018	Bone, uid aves	1	0.2
EU 1	LV 2	CUIS 49450	64.00019	Bone, uid fish vertebra	2	0.2
EU 1	LV 2	CUIS 49451	64.0002	Bone, uid turtle, fragments	3	6.7

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 1	LV 2	CUIS 49452	64.00021	Bone, uid aves, fragment	3	3.3
EU 1	LV 2	CUIS 49453	64.00022	Bone, uid fish	1	0.1
EU 1	LV 2	CUIS 49454	64.00023	Bone, uid frog	4	0.4
EU 1	LV 2	CUIS 49455	64.00024	Plant seed	1	0.1
EU 1	LV 2	CUIS 49456	64.00025	Bone, uid fragments	12	3.2
EU 1	LV 3	CUIS 49457	65.00001	Mochaware	1	0.8
EU 1	LV 3	CUIS 49458	65.00002	Whiteware	1	2
EU 1	LV 3	CUIS 49459	65.00003	Pearlware, blue-glazed	1	0.6
EU 1	LV 3	CUIS 49460	65.00004	Creamware base	1	4.5
EU 1	LV 3	CUIS 49461	65.00005	Porcelain, gold-rimmed	1	4.2
EU 1	LV 3	CUIS 49462	65.00006	Earthenware, glazed -burned	1	2.3
EU 1	LV 3	CUIS 49463	65.00007	Stoneware	1	1.7
EU 1	LV 3	CUIS 49464	65.00008	Stoneware, unglazed	1	7.5
EU 1	LV 3	CUIS 49465	65.00009	Pearlware, burned	1	0.4
EU 1	LV 3	CUIS 49466	65.0001	Earthenware, glazed w/ blue band, burned	1	0.7
EU 1	LV 3	CUIS 49467	65.00011	Clay pipe stem	1	2.3
EU 1	LV 3	CUIS 49468	65.00012	Glass, green, fragments	4	6.1
EU 1	LV 3	CUIS 49469	65.00013	Container glass, olive green	2	1
EU 1	LV 3	CUIS 49470	65.00014	Brick fragments	2	1.2
EU 1	LV 3	CUIS 49471	65.00015	Nails, machine cut	6	40.8
EU 1	LV 3	CUIS 49472	65.00016	Brass, uid	1	1.3
EU 1	LV 3	CUIS 49473	65.00017	Nail, brass	1	1.8
EU 1	LV 3	CUIS 49474	65.00018	Nail, machine cut fragment, clinched	1	2.3
EU 1	LV 3	CUIS 49475	65.00019	Metal buckle	1	10.8
EU 1	LV 3	CUIS 49476	65.0002	Nail, wrought iron fragments	1	12.5
EU 1	LV 3	CUIS 49477	65.00021	Nail, uid fragments	23	59.6
EU 1	LV 3	CUIS 49478	65.00022	Metal, uid fragments	12	18.4
EU 1	LV 3	CUIS 49479	65.00023	Bone, uid fragments	16	4.4
EU 1	LV 3	CUIS 49480	65.00024	Bone, uid, burned	1	0.7
EU 1	LV 3	CUIS 49481	65.00025	Fish scales	13	0.2
EU 1	LV 3	CUIS 49482	65.00026	Bone, uid fish vertebra	4	0.4
EU 1	LV 3	CUIS 49483	65.00027	Bone, uid bones	2	0.4
EU 1	LV 4	CUIS 49484	66.00001	Creamware	1	0.5
EU 1	LV 4	CUIS 49485	66.00002	Earthenware, burned	5	13.8
EU 1	LV 4	CUIS 49486	66.00003	Stoneware, glazed	5	9.1
EU 1	LV 4	CUIS 49487	66.00004	Glass fragments	7	25.7
EU 1	LV 4	CUIS 49488	66.00005	Container glass, olive green	1	0.9
EU 1	LV 4	CUIS 49489	66.00006	Nail, machine cut fragments	6	20.9
EU 1	LV 4	CUIS 49490	66.00007	Nail, wrought iron, fragments	2	14.9
EU 1	LV 4	CUIS 49491	66.00008	Nail, uid fragments	27	41.2
EU 1	LV 4	CUIS 49492	66.00009	Lead fragment	1	9.8
EU 1	LV 4	CUIS 49493	66.0001	Shell, clam	2	38.1
EU 1	LV 4	CUIS 49494	66.00011	Barnacle	2	0.6
EU 1	LV 4	CUIS 49495	66.00012	Bone, uid vertebra	2	0.3
EU 1	LV 4	CUIS 49496	66.00013	Bone, uid fragments	6	0.7
EU 1	LV 4	CUIS 49497	66.00014	Uid fish scales	4	0

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 1	LV 5	CUIS 49498	67.00001	Pearlware, burned	1	1.2
EU 1	LV 5	CUIS 49499	67.00002	Pearlware base	1	5
EU 1	LV 5	CUIS 49500	67.00003	Stoneware, glazed, burned	1	13.1
EU 1	LV 5	CUIS 49501	67.00004	Stoneware, unglazed	1	1.1
EU 1	LV 5	CUIS 49502	67.00005	Stoneware	1	9.7
EU 1	LV 5	CUIS 49503	67.00006	Brick fragments	4	5.3
EU 1	LV 5	CUIS 49504	67.00007	Mortar	4	3.1
EU 1	LV 5	CUIS 49505	67.00008	Nail, uid fragments	5	6
EU 1	LV 5	CUIS 49506	67.00009	Nail, wrought iron	1	8.6
EU 1	NE Corner Fill	CUIS 49507	68.00001	Bone, uid fragment	1	0.1
EU 1	NE Corner Fill	CUIS 49508	68.00002	Nail, uid fragment	1	7.2
EU 1	FEAT 2	CUIS 49509	69.00001	Creamware, decorated	1	0.5
EU 1	FEAT 2	CUIS 49510	69.00002	Stoneware, glazed, burned	1	12.2
EU 1	FEAT 2	CUIS 49511	69.00003	Glass, colorless fragment	1	0.1
EU 1	FEAT 2	CUIS 49512	69.00004	Brick fragments	2	2.4
EU 1	FEAT 2	CUIS 49513	69.00005	Mortar	1	1.8
EU 1	FEAT 2	CUIS 49514	69.00006	Container glass, olive green	1	2.1
EU 1	FEAT 2	CUIS 49515	69.00007	Nail, uid fragments	5	21.4
EU 1	FEAT 2	CUIS 49516	69.00008	Nail, wrought iron, fragments	4	21.9
EU 1	FEAT 2	CUIS 49517	69.00009	Metal, uid fragments	4	2.4
EU 1	FEAT 2	CUIS 49518	69.0001	Bone, uid tooth fragment	1	1.6
EU 1	FEAT 2	CUIS 49519	69.00011	Uid fish scales	3	0.1
EU 1	FEAT 2	CUIS 49520	69.00012	Bone, uid fragments	2	2
EU 2	LV 1	CUIS 49521	70.00001	Pearlware	2	3.8
EU 2	LV 1	CUIS 49522	70.00002	Pearlware base	1	1.5
EU 2	LV 1	CUIS 49523	70.00003	Pearlware, blue transfer print	1	0.8
EU 2	LV 1	CUIS 49524	70.00004	Container glass, light green/blue	1	1.6
EU 2	LV 1	CUIS 49525	70.00005	Glass, colorless fragment	1	0.1
EU 2	LV 1	CUIS 49526	70.00006	Container glass, olive green	1	4.2
EU 2	LV 1	CUIS 49527	70.00007	Brick fragments	2	4.8
EU 2	LV 1	CUIS 49528	70.00008	Nail, uid fragments	3	5.6
EU 2	LV 1	CUIS 49529	70.00009	Metal, uid fragments	4	6
EU 2	LV 2	CUIS 49530	71.00001	Pearlware, green shell-edged , rim	1	1.4
EU 2	LV 2	CUIS 49531	71.00002	Annularware	1	0.5
EU 2	LV 2	CUIS 49532	71.00003	Creamware, decorated, rim	1	0.5
EU 2	LV 2	CUIS 49533	71.00004	Creamware rim	1	2.1
EU 2	LV 2	CUIS 49534	71.00005	Creamware, hand-painted	1	0.6
EU 2	LV 2	CUIS 49535	71.00006	Porcelain	2	0.6
EU 2	LV 2	CUIS 49536	71.00007	Pearlware	4	7
EU 2	LV 2	CUIS 49537	71.00008	Annularware, rim	1	1
EU 2	LV 2	CUIS 49538	71.00009	Procelain, underglaze blue rim	1	2.2
EU 2	LV 2	CUIS 49539	71.0001	Pearlware, blue transfer-print	1	0.6
EU 2	LV 2	CUIS 49540	71.00011	Pearlware base	1	5.5
EU 2	LV 2	CUIS 49541	71.00012	Creamware	12	55.9
EU 2	LV 2	CUIS 49542	71.00013	Creamware rim	1	0.8
EU 2	LV 2	CUIS 49543	71.00014	Annularware, rim	1	12
EU 2	LV 2	CUIS 49544	71.00015	Clay pipe stem with bowl	1	4

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 2	LV 2	CUIS 49545	71.00016	Clay pipe stems	4	9.5
EU 2	LV 2	CUIS 49546	71.00017	Brick fragments	9	19.8
EU 2	LV 2	CUIS 49547	71.00018	Container glass, light green/blue	2	0.6
EU 2	LV 2	CUIS 49548	71.00019	Glass, colorless, fragment	1	0.5
EU 2	LV 2	CUIS 49549	71.0002	Glass, aqua, fragments	1	1.1
EU 2	LV 2	CUIS 49550	71.00021	Container glass, olive green	14	81.9
EU 2	LV 2	CUIS 49551	71.00022	Brass, uid hardware	1	25.6
EU 2	LV 2	CUIS 49552	71.00023	Button, brass	1	7.4
EU 2	LV 2	CUIS 49553	71.00024	Nail, uid fragments	30	72.3
EU 2	LV 2	CUIS 49554	71.00025	Nail, machine cut fragments	2	14.9
EU 2	LV 2	CUIS 49555	71.00026	Nail, wrought iron, fragments	4	20.7
EU 2	LV 2	CUIS 49556	71.00027	Metal, uid fragments	9	22.2
EU 2	LV 2	CUIS 49557	71.00028	Bone, uid tooth fragments	2	2.2
EU 2	LV 3	CUIS 49558	72.00001	Pearlware blue, shell-edged, rim	1	10
EU 2	LV 3	CUIS 49559	72.00002	Pearlware, hand-painted, ring-base	1	6.2
EU 2	LV 3	CUIS 49560	72.00003	Pearlware, hand-painted, rim	1	3.9
EU 2	LV 3	CUIS 49561	72.00004	Pearlware, blue transfer print, rim	1	0.7
EU 2	LV 3	CUIS 49562	72.00005	Pearlware, blue transfer print	1	1.7
EU 2	LV 3	CUIS 49563	72.00006	Pearlware	1	3.5
EU 2	LV 3	CUIS 49564	72.00007	Creamware, decorated, rim	1	1.6
EU 2	LV 3	CUIS 49565	72.00008	Creamware rim	1	2.1
EU 2	LV 3	CUIS 49566	72.00009	Creamware	7	31.8
EU 2	LV 3	CUIS 49567	72.0001	Whiteware, burned	1	0.8
EU 2	LV 3	CUIS 49568	72.00011	Earthenware, glazed rim, burned	1	3.9
EU 2	LV 3	CUIS 49569	72.00012	Brick fragments	26	64.3
EU 2	LV 3	CUIS 49570	72.00013	Mortar	1	8.7
EU 2	LV 3	CUIS 49571	72.00014	Container glass, olive green	3	9.5
EU 2	LV 3	CUIS 49572	72.00015	Glass fragment, light green	1	0.3
EU 2	LV 3	CUIS 49573	72.00016	Container glass, light blue/green	4	0.9
EU 2	LV 3	CUIS 49574	72.00017	Flat glass, light blue/green	2	1.1
EU 2	LV 3	CUIS 49575	72.00018	Glass, colorless fragment	1	0.9
EU 2	LV 3	CUIS 49576	72.00019	Container glass, patinated	1	7.6
EU 2	LV 3	CUIS 49577	72.0002	Button, bone	1	0.6
EU 2	LV 3	CUIS 49578	72.00021	Nails, brass	2	6.1
EU 2	LV 3	CUIS 49579	72.00022	Nail, machine cut	9	63.5
EU 2	LV 3	CUIS 49580	72.00023	Nail, wrought iron fragments	5	20.1
EU 2	LV 3	CUIS 49581	72.00024	Nail, uid fragments	37	125.3
EU 2	LV 3	CUIS 49582	72.00025	Spike, wrought iron	2	41.1
EU 2	LV 3	CUIS 49583	72.00026	Brass, uid	1	1.1
EU 2	LV 3	CUIS 49584	72.00027	Metal, uid fragments	15	16.5
EU 2	LV 3	CUIS 49585	72.00028	Bone, pig (sus scrofa) tusk	1	5.3
EU 2	LV 3	CUIS 49586	72.00029	Bone, uid tooth fragments	3	3.4
EU 2	LV 3	CUIS 49587	72.0003	Barnacle	1	1.3
EU 2	LV 3	CUIS 49588	72.00031	Bone, turtle carapace	5	6.8
EU 2	LV 3	CUIS 49589	72.00032	Bone, aves long bone	1	0.1
EU 2	LV 3	CUIS 49590	72.00033	Bone, uid fragments	14	11.6
EU 2	LV 3	CUIS 49591	72.00034	Bone, uid fragments, burned	4	4.5

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 2	LV 3	CUIS 49592	72.00035	Iron bar	1	164.8
EU 2	LV 3	CUIS 49593	72.00036	Mortar	1	62.7
EU 2	LV 3	CUIS 49594	72.00037	Shells, oyster	4	167.6
EU 2	LV 3	CUIS 49595	72.00038	Brick fragment	1	27.2
EU 2	LV 4	CUIS 49596	73.00001	Creamware	1	1
EU 2	LV 4	CUIS 49597	73.00002	Container glass, olive green	1	2.6
EU 2	LV 4	CUIS 49598	73.00003	Bone, uid fragment, burned	1	5.3
EU 2	LV 5	CUIS 49599	74.00001	Glass, colorless fragment	1	0.2
EU 2	LV 5	CUIS 49600	74.00002	Mortar	1	6.8
EU 2	LV 6	CUIS 49601	75.00001	Nail, uid fragment	1	3.1
EU 2	Feature 1	CUIS 49602	76.00001	Creamware	1	2.8
EU 2	Feature 1	CUIS 49603	76.00002	Creamware, brown glazed	1	1.1
EU 2	Feature 1	CUIS 49604	76.00003	Container glass, olive green	1	1.5
EU 2	Feature 1	CUIS 49605	76.00004	Container glass, light green/blue	1	0.1
EU 2	Feature 1	CUIS 49606	76.00005	Brick fragments	6	158.8
EU 2	Feature 1	CUIS 49607	76.00006	Nail, machine cut	1	2.2
EU 2	Feature 1	CUIS 49608	76.00007	Nail, wrought iron	1	9.3
EU 2	Feature 1	CUIS 49609	76.00008	Nail, wrought iron, fragment	1	7.6
EU 2	Feature 1	CUIS 49610	77.00001	Mortar	2	33
EU 1	Sample	CUIS 49628	80.00001	Mortar sample	8	3295.6
Main Road	Surface collection	CUIS 49629	81.00001	Ballast stone with possible ingraved initials	1	122.2
EU 3	LV 1	CUIS 49630	82.00001	Creamware	1	1.1
EU 3	LV 1	CUIS 49631	82.00002	Container glass, olive green	1	0.5
EU 3	LV 1	CUIS 49632	82.00003	Nail, wrought iron, fragments	4	27.2
EU 3	LV 1	CUIS 49633	82.00004	Nail, uid fragments	20	40
EU 3	LV 1	CUIS 49634	82.00005	Bone,uid fragments	2	1.1
EU 3	LV 2	CUIS 49635	83.00001	Annularware rim and body	4	3.8
EU 3	LV 2	CUIS 49636	83.00002	Pearlware, blue transfer-print, rim	1	3.2
EU 3	LV 2	CUIS 49637	83.00003	Pearlware, blue transfer-print	5	6.9
EU 3	LV 2	CUIS 49638	83.00004	Pearlware, blue shell-edged, rim	1	5
EU 3	LV 2	CUIS 49639	83.00005	Pearlware, blue hand painted, rim and body	4	2.6
EU 3	LV 2	CUIS 49640	83.00006	Pearlware, blue-glazed	1	0
EU 3	LV 2	CUIS 49641	83.00007	Pearlware	4	8.5
EU 3	LV 2	CUIS 49642	83.00008	Pearlware, rim	1	1.5
EU 3	LV 2	CUIS 49643	83.00009	Creamware	5	2.8
EU 3	LV 2	CUIS 49644	83.0001	Creamware base	2	9.6
EU 3	LV 2	CUIS 49645	83.00011	Porcelain, blue-glazed, rim	1	0.7
EU 3	LV 2	CUIS 49646	83.00012	Porcelain	1	0.8
EU 3	LV 2	CUIS 49647	83.00013	Stoneware, glazed	1	4.4
EU 3	LV 2	CUIS 49648	83.00014	Stoneware, glazed, burned,	1	2.4
EU 3	LV 2	CUIS 49649	83.00015	Earthenware, glazed	1	8.5
EU 3	LV 2	CUIS 49650	83.00016	Stoneware	6	9.7
EU 3	LV 2	CUIS 49651	83.00017	Stoneware, glazed	1	18.1
EU 3	LV 2	CUIS 49652	83.00018	Stoneware, brown glazed	4	9.7
EU 3	LV 2	CUIS 49653	83.00019	Glass, aqua fragment	1	1.3

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 3	LV 2	CUIS 49654	83.0002	glass, colorless fragments	3	2.7
EU 3	LV 2	CUIS 49655	83.00021	Glass fragments	2	4.4
EU 3	LV 2	CUIS 49656	83.00022	Container glass, olive green	11	5.8
EU 3	LV 2	CUIS 49657	83.00023	Metal, uid hardware	1	9.9
EU 3	LV 2	CUIS 49658	83.00024	Nails, machine cut	7	40.1
EU 3	LV 2	CUIS 49659	83.00025	Nail, machine cut, fragments	2	8.4
EU 3	LV 2	CUIS 49660	83.00026	Spike, wrought iron	1	71.6
EU 3	LV 2	CUIS 49661	83.00027	Nail, uid fragments	83	194.8
EU 3	LV 2	CUIS 49662	83.00028	Nail, wrought iron, fragments	11	44.4
EU 3	LV 2	CUIS 49663	83.00029	Metal, uid fragments	21	17.3
EU 3	LV 2	CUIS 49664	83.0003	Bone, uid fragments	5	10.7
EU 3	LV 2	CUIS 49665	83.00031	Bone, aves long bone fragments	2	8.8
EU 3	LV 2	CUIS 49666	83.00032	Metal, uid iron strap	1	25.5
EU 3	LV 2	CUIS 49667	83.00033	Metal vessel fragment	1	267.8
EU 3	LV 2	CUIS 49668	84.00001	Annular ware rim and body	3	2.4
EU 3	LV 3	CUIS 49669	84.00002	Pearlware, blue transfer print, rim and body	3	1.4
EU 3	LV 3	CUIS 49670	84.00003	Pearlware, hand-painted polychrome	1	1.8
EU 3	LV 3	CUIS 49671	84.00004	Creamware	6	5
EU 3	LV 3	CUIS 49672	84.00005	Whiteware	2	2.5
EU 3	LV 3	CUIS 49673	84.00006	Earthenware, hand painted rim and body-bur	3	4.2
EU 3	LV 3	CUIS 49674	84.00007	Stoneware, glazed, bottle base	1	19.6
EU 3	LV 3	CUIS 49675	84.00008	Earthenwareware, glazed -burned	1	2.3
EU 3	LV 3	CUIS 49676	84.00009	Stoneware, glazed w/ gray paste	1	1.8
EU 3	LV 3	CUIS 49677	84.0001	Earthenware, glazed, burned	2	9.7
EU 3	LV 3	CUIS 49678	84.00011	Stoneware	1	0.7
EU 3	LV 3	CUIS 49679	84.00012	Clay pipe stem	1	1.5
EU 3	LV 3	CUIS 49680	84.00013	Container glass, light blue-green	2	1
EU 3	LV 3	CUIS 49681	84.00014	Container glass, olive green	6	8.1
EU 3	LV 3	CUIS 49682	84.00015	Glass fragments	6	32.9
EU 3	LV 3	CUIS 49683	84.00016	Brick fragments	2	2.1
EU 3	LV 3	CUIS 49684	84.00017	Button, brass	1	1.3
EU 3	LV 3	CUIS 49685	84.00018	Lead shot	1	1.7
EU 3	LV 3	CUIS 49686	84.00019	Nail, machine cut, fragments	7	23.3
EU 3	LV 3	CUIS 49687	84.0002	Nail, machine cut	1	1.8
EU 3	LV 3	CUIS 49688	84.00021	Nail, wrought iron fragments	6	24.7
EU 3	LV 3	CUIS 49689	84.00022	Nail, uid fragments	40	52.1
EU 3	LV 3	CUIS 49690	84.00023	Metal, uid fragments	5	6.6
EU 3	LV 3	CUIS 49691	84.00024	Brass, uid fragment	1	0.5
EU 3	LV 3	CUIS 49692	84.00025	Brass clip w/ rose motif	1	6.6
EU 3	LV 3	CUIS 49693	84.00026	Bone, uid fragments, burned	2	1.2
EU 3	LV 3	CUIS 49694	84.00027	Bone, uid vertebra	6	0
EU 3	LV 3	CUIS 49695	84.00028	Bone, uid fragments	17	5.9
EU 3	LV 3	CUIS 49696	84.00029	Uid fish scales	2	
EU 3	LV 3	CUIS 49697	84.0003	Shell, clam	1	62.5
EU 3	LV 3	CUIS 49698	84.00031	Iron cookong pan/oven fragment	1	1809.8

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
EU 3	LV 4	CUIS 49699	85.00001	Creamware	1	0.5
EU 3	LV 4	CUIS 49700	85.00002	Nail, brass	1	3
EU 3	LV 4	CUIS 49701	85.00003	Nail, wrought iron	1	6.4
EU 3	LV 4	CUIS 49702	85.00004	Nail, uid fragment	1	2
EU 3	LV 4	CUIS 49703	85.00005	Metal, uid fragments	3	3.4
EU 3	LV 5	CUIS 49704	86.00001	Bone, uid vertebra	1	0
EU 3	LV 6	CUIS 49705	87.00001	Earthenware, glazed, burned	1	0.8
EU 3	LV 6	CUIS 49706	87.00002	Metal, uid fragments	2	3
EU 1	LV 6	CUIS 49707	88.00001	Brick fragment	1	1.9
EU 1	LV 6	CUIS 49708	88.00002	Mortar	1	0.8
EU 1	LV 6	CUIS 49709	88.00003	Nail, uid fragments	2	2
EU 1	LV 6	CUIS 49710	88.00004	Nail, wrought iron fragment	1	5.5
EU 1	FEAT 2, LV 1	CUIS 49711	89.00001	Nail, uid fragments	2	12
EU 1	FEAT 2, LV 2	CUIS 49712	90.00001	Nail, uid fragment	1	7.8
EU 1	FEAT 2, LV 3	CUIS 49713	91.00001	Stoneware, glazed	1	4.3
EU 1	FEAT 2, LV 3	CUIS 49714	91.00002	Glass fragments	2	1.3
EU 1	FEAT 2, LV 3	CUIS 49715	91.00003	Metal object, possible sail and packing needle	1	12.6
EU 1	FEAT 2, LV 5	CUIS 49716	92.00001	Nail, uid fragment	1	0.7
EU 3	Wall Cleaning	CUIS 49717	93.00001	annularware	1	6.2
EU 3	Wall Cleaning	CUIS 49718	93.00002	uid nail fragments	2	2
EU 3	Wall Cleaning	CUIS 49719	93.00003	cut nail fragment	1	2.5

Appendix 3

Collections From the Duck Pond (1902.03)

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 01	410E, 590N	CUIS 49720	94.00001	Uld-stamped, sand-tempered	2	7.1
ST 01	410E, 590N	CUIS 49721	94.00002	Metal, uid fragments	2	2.2
ST 01	410E, 590N	CUIS 49722	94.00003	Barbed wire	1	22
ST 01	410E, 590N	CUIS 49723	94.00004	Mortar	1	2.6
ST 02	410E, 600N	CUIS 49724	95.00001	Incised fiber-tempered pottery, rim, and body	2	13.8
ST 02	410E, 600N	CUIS 49725	95.00002	Brass thermometer gauge, fragment	1	11.6
ST 03	410E, 610N	CUIS 49726	96.00001	Plain, sand-tempered pottery	1	4.3
ST 03	410E, 610N	CUIS 49727	96.00002	Plain, sand/grit-tempered pottery	3	1.4
ST 04	420E, 590N	CUIS 49728	97.00001	Uld-stamped, grog-tempered pottery	1	7.8
ST 04	420E, 590N	CUIS 49729	97.00002	Uld-stamped, sand-tempered pottery	1	4.7
ST 04	420E, 590N	CUIS 49730	97.00003	Plain, grog-tempered pottery	1	4.1
ST 04	420E, 590N	CUIS 49731	97.00004	Plain, sand-tempered pottery	3	1.4
ST 04	420E, 590N	CUIS 49732	97.00005	Cord-marked, sand-tempered pottery	1	1.6
ST 04	420E, 590N	CUIS 49733	97.00006	Metal, uid fragment	1	1.2
ST 05	420E, 600N	CUIS 49734	98.00001	Plain, sand-tempered pottery, rim	1	2.9
ST 05	420E, 600N	CUIS 49735	98.00002	Plain, grog-tempered pottery	2	4
ST 05	420E, 600N	CUIS 49736	98.00003	Iron concretion	1	3.3
ST 06	420E, 610N	CUIS 49737	99.00001	Plain, grog-tempered pottery	1	3.9
ST 06	420E, 610N	CUIS 49738	99.00002	Plain, sand-tempered pottery	2	1.2
ST 07	430E, 590N	CUIS 49739	100.00001	Plain, grog-tempered pottery	1	1.3
ST 07	430E, 590N	CUIS 49740	100.00002	Plain, sand-tempered pottery	1	1.3
ST 07	430E, 590N	CUIS 49741	100.00003	Uld burned bone fragment	1	0.6
ST 08	430E, 600N	CUIS 49742	101.00001	Pearlware, hand-painted, rim	1	1.4
ST 08	430E, 600N	CUIS 49743	101.00002	Uld-stamped, sand-tempered pottery	1	3.1
ST 08	430E, 600N	CUIS 49744	101.00003	Plain, grog-tempered pottery	1	4
ST 08	430E, 600N	CUIS 49745	101.00004	Plain, sand-tempered pottery	1	2.5
ST 08	430E, 600N	CUIS 49746	101.00005	Plain, fiber-tempered pottery	1	0.7
ST 08	430E, 600N	CUIS 49747	101.00006	Uld-stamped, sand-tempered	1	10.7
ST 08	430E, 600N	CUIS 49748	101.00007	Plain, grog-tempered pottery	1	6.9
ST 08	430E, 600N	CUIS 49749	101.00008	Brick fragments	1	1.2
ST 08	430E, 600N	CUIS 49750	101.00009	Oyster shell	1	1.6
ST 09	440E, 470N	CUIS 49751	102.00001	Uld-stamped, sand/grit tempered pottery	7	31
ST 09	440E, 470N	CUIS 49752	102.00002	Plain, sand-tempered	5	7.8
ST 09	440E, 470N	CUIS 49753	102.00003	Stoneware, glazed	1	0.4
ST 09	440E, 470N	CUIS 49754	102.00004	Brick fragments	2	5.3
ST 09	440E, 470N	CUIS 49755	102.00005	Glass fragment, light blue-green	1	0.4
ST 09	440E, 470N	CUIS 49756	102.00006	Uld stamped w/ cane punctuation	1	5.7
ST 10	440E, 480N	CUIS 49757	103.00001	Uld stamped, sand-tempered pottery	2	4
ST 10	440E, 480N	CUIS 49758	103.00002	Cord-marked, sand-tempered pottery	1	1.7
ST 10	440E, 480N	CUIS 49759	103.00003	Plain, sand-tempered pottery	1	3.5
ST 10	440E, 480N	CUIS 49760	103.00004	Nail, uid fragment	1	4
ST 10	440E, 480N	CUIS 49761	103.00005	Bone, uid fragment	1	0.6
ST 10	440E, 480N	CUIS 49762	103.00006	Coal	3	5.1
ST 11	440E, 490N	CUIS 49763	104.00001	Plain, sand-tempered pottery	1	2.8

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 11	440E, 490N	CUIS 49764	104.00002	Uld-stamped, sand-tempered pottery	1	1.3
ST 11	440E, 490N	CUIS 49765	104.00003	Pearlware, blue transfer-print	1	0.5
ST 11	440E, 490N	CUIS 49766	104.00004	Earthenware, glazed	1	0.8
ST 11	440E, 490N	CUIS 49767	104.00005	Terracotta	3	5.4
ST 11	440E, 490N	CUIS 49768	104.00006	Container glass, green	1	0.9
ST 11	440E, 490N	CUIS 49769	104.00007	Nail, uid fragment	1	0.8
ST 11	440E, 490N	CUIS 49770	104.00008	Bone, uid fragment	1	0.2
ST 12	440E, 500N	CUIS 49771	105.00001	Plain, fiber-tempered pottery	6	50.3
ST 12	440E, 500N	CUIS 49772	105.00002	Earthenware, glazed	1	2.9
ST 12	440E, 500N	CUIS 49773	105.00003	Glass, patinated	1	2.6
ST 13	440E, 510N	CUIS 49774	106.00001	Cord-marked, sand-tempered pottery	1	1.3
ST 13	440E, 510N	CUIS 49775	106.00002	Plain, sand-tempered pottery	2	4.9
ST 13	440E, 510N	CUIS 49776	106.00003	Earthenware, glazed , rim	2	3.8
ST 14	440E, 560N	CUIS 49777	107.00001	Cord-marked, sand-tempered pottery	1	2.7
ST 14	440E, 560N	CUIS 49778	107.00002	Uld stamped, sand-tempered pottery	1	2
ST 14	440E, 560N	CUIS 49779	107.00003	Plain, fiber-tempered pottery	3	2.6
ST 14	440E, 560N	CUIS 49780	107.00004	Plain, sand-tempered pottery	5	10.3
ST 14	440E, 560N	CUIS 49781	107.00005	Bone, uid fragment	1	0.3
ST 15	440E, 570N	CUIS 49782	108.00001	Uld stamped, sand-tempered pottery	1	0.9
ST 16	450E, 410N	CUIS 49783	109.00001	Plain, sand-tempered pottery	3	3.9
ST 16	450E, 410N	CUIS 49784	109.00002	Brick fragments	2	37.9
ST 17	450E, 470N	CUIS 49785	110.00001	Glass fragment, patinated	1	1.1
ST 17	450E, 470N	CUIS 49786	110.00002	Nail, machine cut, fragment	1	4.5
ST 17	450E, 470N	CUIS 49787	110.00003	Metal, uid fragment	1	0.6
ST 19	450E, 490N	CUIS 49788	111.00001	Plain, fiber-tempered pottery	3	21.6
ST 19	450E, 490N	CUIS 49789	111.00002	Cord-marked, sand-tempered pottery	2	2.1
ST 19	450E, 490N	CUIS 49790	111.00003	Uld stamped, sand-tempered pottery	1	3.6
ST 19	450E, 490N	CUIS 49791	111.00004	Terracotta	3	34
ST 19	450E, 490N	CUIS 49792	111.00005	Nail, uid fragment	1	0.9
ST 19	450E, 490N	CUIS 49793	111.00006	Metal, uid fragment	1	0.8
ST 19	450E, 490N	CUIS 49794	111.00007	Coal	1	0.7
ST 19	450E, 490N	CUIS 49795	111.00008	Wire	3	13.5
ST 19	450E, 490N	CUIS 49796	111.00009	Bone, uid otolith	1	0.4
ST 19	450E, 490N	CUIS 49797	111.0001	Bone, uid fragments	8	2.5
ST 19	450E, 490N	CUIS 49798	111.00011	Bone, uid fragments, burned	1	0.8
ST 19	450E, 490N	CUIS 49799	111.00012	Charcoal	2	0.3
ST 19	450E, 490N	CUIS 49800	111.00013	Concretions	4	4.9
ST 19	450E, 490N	CUIS 49801	111.00014	Bone, uid vertebra	2	3.7
ST 20	450E, 500N	CUIS 49802	112.00001	Creamware	1	2.8
ST 20	450E, 500N	CUIS 49803	112.00002	Cord-marked, sand-tempered pottery	2	2.1
ST 20	450E, 500N	CUIS 49804	112.00003	Coal slag	1	10.2
ST 20	450E, 500N	CUIS 49805	112.00004	Bone, uid fragments	8	1.5
ST 21	450E, 570N	CUIS 49806	113.00001	Plain, grog-tempered pottery	2	38.9
ST 21	450E, 570N	CUIS 49807	113.00002	Uld stamped, sand-tempered pottery	1	4.4
ST 21	450E, 570N	CUIS 49808	113.00003	Plain, sand-tempered pottery	2	5.2
ST 21	450E, 570N	CUIS 49809	113.00004	Bone, uid, fragment, burned	1	0.5
ST 22	460E, 400N	CUIS 49810	114.00001	Container glass, olive green	1	0.7

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 22	460E, 400N	CUIS 49811	114.00002	Flat glass, colorless	1	2.5
ST 22	460E, 400N	CUIS 49812	114.00003	Flat glass, frosted	11	19.4
ST 22	460E, 400N	CUIS 49813	114.00004	Flat glass, light blue-green	37	69.7
ST 22	460E, 400N	CUIS 49814	114.00005	Coal slag	2	2.7
ST 22	460E, 400N	CUIS 49815	114.00006	Slate, red	1	1.7
ST 22	460E, 400N	CUIS 49816	114.00007	Coal	10	5
ST 22	460E, 400N	CUIS 49817	114.00008	Charcoal	2	1.9
ST 22	460E, 400N	CUIS 49818	114.00009	Bone, uid fragment	1	1.1
ST 23	460E, 410N	CUIS 49819	115.00001	Flat glass, colorless	4	6.6
ST 23	460E, 410N	CUIS 49820	115.00002	Flat glass, light blue-green	81	121.1
ST 23	460E, 410N	CUIS 49821	115.00003	Brass, uid fragment	1	1.2
ST 23	460E, 410N	CUIS 49822	115.00004	Brick fragment	1	0.3
ST 23	460E, 410N	CUIS 49823	115.00005	Mortar	1	0.5
ST 23	460E, 410N	CUIS 49824	115.00006	Coal	1	1.2
ST 24	460E, 420N	CUIS 49825	116.00001	Barbed wire fragment	1	3.3
ST 24	460E, 420N	CUIS 49826	116.00002	Metal, uid fragments	2	0.6
ST 24	460E, 420N	CUIS 49827	116.00003	Coal	1	0.3
ST 24	460E, 420N	CUIS 49828	116.00004	Brick fragments	6	11.9
ST 24	460E, 420N	CUIS 49829	116.00005	Coal slag	2	0.7
ST 25	460E, 480N	CUIS 49830	117.00001	Container glass, colorless	1	1.1
ST 25	460E, 480N	CUIS 49831	117.00002	Container glass, light blue-green	1	3.4
ST 26	460E, 490N	CUIS 49832	118.00001	Uid stamped, sand-tempered pottery	1	2
ST 26	460E, 490N	CUIS 49833	118.00002	Plain, sand-tempered pottery	1	8.7
ST 26	460E, 490N	CUIS 49834	118.00003	Metal, uid fragment	1	11.4
ST 26	460E, 490N	CUIS 49835	118.00004	Brick fragments	2	3.9
ST 28	460E, 510N	CUIS 49836	119.00001	Creamware	1	5.7
ST 28	460E, 510N	CUIS 49837	119.00002	Container glass, olive green	1	17.7
ST 28	460E, 510N	CUIS 49838	119.00003	Plain, fiber-tempered pottery	1	6.7
ST 28	460E, 510N	CUIS 49839	119.00004	Uid-stamped, sand-tempered pottery	1	6.7
ST 28	460E, 510N	CUIS 49840	119.00005	Brick fragment	1	1.6
ST 29	460E, 560N	CUIS 49841	120.00001	Plain, grog-tempered pottery	1	4.5
ST 29	460E, 560N	CUIS 49842	120.00002	Plain, sand-tempered pottery	1	1.4
ST 29	460E, 560N	CUIS 49843	120.00003	Plain, fiber-tempered pottery	1	0.8
ST 30	460E, 570N	CUIS 49844	121.00001	Plain, sand-tempered pottery	2	4.8
ST 30	460E, 570N	CUIS 49845	121.00002	Uid-stamped, sand-tempered pottery	1	4.1
ST 30	460E, 570N	CUIS 49846	121.00003	Plain, fiber-tempered pottery	1	3.9
ST 30	460E, 570N	CUIS 49847	121.00004	Plain, grog-tempered pottery	2	6.2
ST 30	460E, 570N	CUIS 49848	121.00005	Bone, uid fragments	3	2.6
ST 30	460E, 570N	CUIS 49849	121.00006	Bone, uid tooth	1	0.4
ST 31	470E, 400N	CUIS 49850	122.00001	Plain, fiber-tempered pottery	1	2.7
ST 31	470E, 400N	CUIS 49851	122.00002	Plain, sand-tempered pottery	1	0.5
ST 31	470E, 400N	CUIS 49852	122.00003	Mortar	1	4.3
ST 32	470E, 410N	CUIS 49853	123.00001	Ehiteware	1	1
ST 33	470E, 470N	CUIS 49854	124.00001	Plain, fiber-tempered pottery	1	14.4
ST 33	470E, 470N	CUIS 49855	124.00002	Cord-marked, sand-tempered pottery	2	2.4
ST 33	470E, 470N	CUIS 49856	124.00003	Check-stamped, sand-tempered pottery	1	1.8

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 33	470E, 470N	CUIS 49857	124.00004	Incised, sand-tempered pottery	1	5.3
ST 33	470E, 470N	CUIS 49858	124.00005	Plain, sand-tempered pottery	1	2.4
ST 33	470E, 470N	CUIS 49859	124.00006	Nail, uid fragment	1	1
ST 33	470E, 470N	CUIS 49860	124.00007	Lead fragment	1	4.6
ST 33	470E, 470N	CUIS 49861	124.00008	Mortar	1	3.5
ST 33	470E, 470N	CUIS 49862	124.00009	Brick	1	5.3
ST 34	470E, 480N	CUIS 49863	125.00001	Creamware	1	1
ST 34	470E, 480N	CUIS 49864	125.00002	Uid-stamped, grog-tempered pottery	1	4
ST 34	470E, 480N	CUIS 49865	125.00003	Brick fragment	1	2.3
ST 35	470E, 490N	CUIS 49866	126.00001	Cord-marked, sand-tempered pottery	2	1.6
ST 35	470E, 490N	CUIS 49867	126.00002	Plain, sand-tempered pottery	1	4.4
ST 35	470E, 490N	CUIS 49868	126.00003	Nail, uid fragment	1	2
ST 35	470E, 490N	CUIS 49869	126.00004	Brick, gray, fragment	1	28.8
ST 35	470E, 490N	CUIS 49870	126.00005	Brick fragments	2	35.7
ST 35	470E, 490N	CUIS 49871	126.00006	Slate, gray	1	33.1
ST 35	470E, 490N	CUIS 49872	126.00007	Bone, uid fragment, burned	1	0.9
ST 36	470E, 500N	CUIS 49873	127.00001	Creamware, shell-edged	1	8.8
ST 36	470E, 500N	CUIS 49874	127.00002	Cord-marked, sand-tempered pottery	1	3.9
ST 37	470E, 550N	CUIS 49875	128.00001	Plain, grog-tempered pottery	2	9.8
ST 37	470E, 550N	CUIS 49876	128.00002	Plain, sand-tempered pottery	1	3.1
ST 37	470E, 550N	CUIS 49877	128.00003	Granite	1	76.9
ST 38	470E, 560N	CUIS 49878	129.00001	Plain, grog-tempered pottery	1	2.4
ST 38	470E, 560N	CUIS 49879	129.00002	Plain, sand/grit-tempered pottery	1	2.2
ST 38	470E, 560N	CUIS 49880	129.00003	Brick fragments	2	1.3
ST 38	470E, 560N	CUIS 49881	129.00004	Glass, patinated	1	1
ST 38	470E, 560N	CUIS 49882	129.00005	Coal slag	1	1.3
ST 38	470E, 560N	CUIS 49883	129.00006	Bone, uid fragment	1	0.3
ST 38	470E, 560N	CUIS 49884	129.00007	Coal	1	0.3
ST 39	470E, 570N	CUIS 49885	130.00001	Plain, fiber-tempered pottery	4	2.5
ST 39	470E, 570N	CUIS 49886	130.00002	Plain, sand-tempered pottery rim	1	2.3
ST 39	470E, 570N	CUIS 49887	130.00003	Uid stamped, sand-tempered pottery	1	4.2
ST 39	470E, 570N	CUIS 49888	130.00004	Plain, sand-tempered pottery	1	2
ST 39	470E, 570N	CUIS 49889	130.00005	Bone, uid fragment	1	2
ST 39	470E, 570N	CUIS 49890	130.00006	Concretion	1	4.2
ST 40	480E, 400N	CUIS 49891	131.00001	Container glass, light blue-green	2	2.7
ST 41	480E, 410N	CUIS 49892	132.00001	Brick fragments	6	27.1
ST 41	480E, 410N	CUIS 49893	132.00002	Container glass, amber	2	1.3
ST 41	480E, 410N	CUIS 49894	132.00003	Flat glass, colorless, patinated	2	3.7
ST 41	480E, 410N	CUIS 49895	132.00004	Flat glass, colorless	1	0.7
ST 41	480E, 410N	CUIS 49896	132.00005	Flat glass, colorless	1	0.1
ST 41	480E, 410N	CUIS 49897	132.00006	Coal slag	1	7.2
ST 41	480E, 410N	CUIS 49898	132.00007	Nail, uid fragments	2	6.2
ST 41	480E, 410N	CUIS 49899	132.00008	Metal, uid fragment	1	0.4
ST 41	480E, 410N	CUIS 49900	132.00009	Bone, uid fragment	1	0.3
ST 42	480E, 460N	CUIS 49901	133.00001	Brick fragments	2	5.3
ST 42	480E, 460N	CUIS 49902	133.00002	Container glass, light blue-green	3	40.4
ST 42	480E, 460N	CUIS 49903	133.00003	Glass, colorless, burned/melted	3	34.6

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 42	480E, 460N	CUIS 49904	133.00004	Flat glass, colorless	1	0.4
ST 42	480E, 460N	CUIS 49905	133.00005	Metal hinge	2	304.9
ST 42	480E, 460N	CUIS 49906	133.00006	Nail, machine cut, fragments	3	13.7
ST 42	480E, 460N	CUIS 49907	133.00007	Slate, gray	1	16
ST 43	480E, 490N	CUIS 49908	134.00001	Plain, sand-tempered pottery	2	6.9
ST 43	480E, 490N	CUIS 49909	134.00002	Brick fragments	2	4.9
ST 43	480E, 490N	CUIS 49910	134.00003	Porcelain rim	1	0.8
ST 43	480E, 490N	CUIS 49911	134.00004	Creamware	1	1.1
ST 43	480E, 490N	CUIS 49912	134.00005	Glass fragments, olive green, patinated	2	2.1
ST 43	480E, 490N	CUIS 49913	134.00006	Bone, uid fish, fragments	2	0.3
ST 44	480E, 500N	CUIS 49914	135.00001	Brick fragments	3	3.3
ST 44	480E, 500N	CUIS 49915	135.00002	Tack, iron	1	1.7
ST 44	480E, 500N	CUIS 49916	135.00003	Spike	1	19.1
ST 45	480E, 550N	CUIS 49917	136.00001	Plain, grog-tempered pottery	3	19.5
ST 45	480E, 550N	CUIS 49918	136.00002	Plain, sand-tempered pottery	3	3.7
ST 46	480E, 560N	CUIS 49919	137.00001	Plain, grog-tempered pottery	2	30.9
ST 46	480E, 560N	CUIS 49920	137.00002	Plain, sand-tempered pottery	2	6.7
ST 47	490E, 400N	CUIS 49921	138.00001	Fiber-tempered pottery, rim and body sherd	5	53.5
ST 47	490E, 400N	CUIS 49922	138.00002	Incised grog-tempered	1	7
ST 47	490E, 400N	CUIS 49923	138.00003	Plain, sand-tempered pottery	3	13.7
ST 48	490E, 410N	CUIS 49924	139.00001	Plain, grog-tempered pottery	1	59.4
ST 48	490E, 410N	CUIS 49925	139.00002	Brick fragment	1	8.5
ST 48	490E, 410N	CUIS 49926	139.00003	Uid stamped, sand-tempered pottery	1	2.5
ST 48	490E, 410N	CUIS 49927	139.00004	Container glass, olive green patinated	2	24.4
ST 48	490E, 410N	CUIS 49928	139.00005	Coal slag	1	28.9
ST 49	490E, 420N	CUIS 49929	140.00001	Glass, colorless	1	0.3
ST 50	490E, 430N	CUIS 49930	141.00001	Cord-marked, sand-tempered pottery	1	5.5
ST 50	490E, 430N	CUIS 49931	141.00002	Brick fragments	3	13
ST 50	490E, 430N	CUIS 49932	141.00003	Mortar	2	9.5
ST 51	490E, 450N	CUIS 49933	142.00001	Glass, colorless, burned	1	2.6
ST 51	490E, 450N	CUIS 49934	142.00002	Brick fragments	4	30.9
ST 51	490E, 450N	CUIS 49935	142.00003	Mortar	1	16.9
ST 51	490E, 450N	CUIS 49936	142.00004	Metal screw	1	4.8
ST 51	490E, 450N	CUIS 49937	142.00005	Nails, machine cut	2	30.1
ST 51	490E, 450N	CUIS 49938	142.00006	Nail, uid fragments	4	12.8
ST 51	490E, 450N	CUIS 49939	142.00007	Metal, uid fragment	1	8.4
ST 51	490E, 450N	CUIS 49940	142.00008	Coal slag	1	1.3
ST 52	490E, 460N	CUIS 49941	143.00001	Cord-marked, sand-tempered pottery	1	2.5
ST 52	490E, 460N	CUIS 49942	143.00002	Glass, colorless	1	0.8
ST 52	490E, 460N	CUIS 49943	143.00003	Container glass, green	1	0.5
ST 52	490E, 460N	CUIS 49944	143.00004	Container glass, olive-green	1	0.6
ST 52	490E, 460N	CUIS 49945	143.00005	Brick fragments	2	6.6
ST 52	490E, 460N	CUIS 49946	143.00006	Mortar	4	118.9
ST 52	490E, 460N	CUIS 49947	143.00007	Nails, wire	2	9.8
ST 53	490E, 490N	CUIS 49948	144.00001	Button, bone	1	0.3
ST 53	490E, 490N	CUIS 49949	144.00002	Brick fragments	3	7.3

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 53	490E, 490N	CUIS 49950	144.00003	Nail, uid fragment	1	1
ST 54	490E, 500N	CUIS 49951	145.00001	Plain, sand-tempered pottery	1	3.7
ST 54	490E, 500N	CUIS 49952	145.00002	Brick fragments	10	10.7
ST 54	490E, 500N	CUIS 49953	145.00003	Metal spring	5	52.6
ST 54	490E, 500N	CUIS 49954	145.00004	Nail, uid frags	13	9.8
ST 54	490E, 500N	CUIS 49955	145.00005	Container glass, colorless	6	6.7
ST 54	490E, 500N	CUIS 49956	145.00006	Glass, patinated	1	0.3
ST 55	490E, 550N	CUIS 49957	146.00001	Plain, grog-tempered pottery	1	9.7
ST 55	490E, 550N	CUIS 49958	146.00002	Plain, sand-tempered pottery rims	2	1.9
ST 55	490E, 550N	CUIS 49959	146.00003	Bone, uid fragment	1	3.2
ST 56	490E, 560N	CUIS 49960	147.00001	Brick fragment	1	1.3
ST 56	490E, 560N	CUIS 49961	147.00002	Button, porcelain	1	0.7
ST 56	490E, 560N	CUIS 49962	147.00003	Tabby mortar	1	77.2
ST 57	490E, 570N	CUIS 49963	148.00001	Plain, grog-tempered pottery	3	8.5
ST 57	490E, 570N	CUIS 49964	148.00002	Plain, fiber-tempered pottery	1	2.9
ST 58	490E, 580N	CUIS 49965	149.00001	Plain, grog-tempered pottery	1	4
ST 58	490E, 580N	CUIS 49966	149.00002	Plain, sand-tempered pottery	1	5.5
ST 58	490E, 580N	CUIS 49967	149.00003	Uid stamped, sand-tempered pottery	2	2.9
ST 58	490E, 580N	CUIS 49968	149.00004	Check-stamped, stand-tempered pottery	1	4.9
ST 58	490E, 580N	CUIS 49969	149.00005	Shell, whelk, with possible extraction hole	1	43.2
ST 59	490E, 590N	CUIS 49970	150.00001	Olive jar sherd	1	14.3
ST 59	490E, 590N	CUIS 49971	150.00002	Plain, sand/grit-tempered pottery	1	2.4
ST 61	500E, 410N	CUIS 49972	151.00001	Plain, fiber-tempered rim and body sherd	2	11.3
ST 63	500E, 430N	CUIS 49973	152.00001	Bone, uid fragment	1	0.1
ST 63	500E, 430N	CUIS 49974	152.00002	Nail, uid fragments	2	3.2
ST 64	500E, 440N	CUIS 49975	153.00001	Plain, grog-tempered pottery	2	4.6
ST 64	500E, 440N	CUIS 49976	153.00002	Lithic, uid	1	4.1
ST 64	500E, 440N	CUIS 49977	153.00003	Glass, colorless	1	1
ST 64	500E, 440N	CUIS 49978	153.00004	Nail, uid fragments	5	3.6
ST 64	500E, 440N	CUIS 49979	153.00005	Brick fragments	6	92.5
ST 64	500E, 440N	CUIS 49980	153.00006	Tabby mortar	1	11.3
ST 64	500E, 440N	CUIS 49981	153.00007	Granite	4	29.6
ST 65	500E, 450N	CUIS 49982	154.00001	Creamware, rim	1	0.5
ST 65	500E, 450N	CUIS 49983	154.00002	Plain, sand-tempered pottery	1	1.1
ST 65	500E, 450N	CUIS 49984	154.00003	Clay pipe stem	1	2.9
ST 65	500E, 450N	CUIS 49985	154.00004	Container glass, olive-green	1	4.7
ST 65	500E, 450N	CUIS 49986	154.00005	Glass, brown	3	0.5
ST 65	500E, 450N	CUIS 49987	154.00006	Container glass, colorless	1	0.9
ST 65	500E, 450N	CUIS 49988	154.00007	12 gauge shotgun shell fragment	1	5.7
ST 65	500E, 450N	CUIS 49989	154.00008	Spike	1	34.7
ST 65	500E, 450N	CUIS 49990	154.00009	Nails, machine cut	2	9
ST 65	500E, 450N	CUIS 49991	154.0001	Nail, wire	1	1.9
ST 65	500E, 450N	CUIS 49992	154.00011	Nail, uid fragment	1	1.8
ST 65	500E, 450N	CUIS 49993	154.00012	Nail, uid fragment	1	1.4

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 65	500E, 450N	CUIS 49994	154.00013	Metal, uid fragments	4	1.2
ST 65	500E, 450N	CUIS 49995	154.00014	Chert debitage	1	8.4
ST 65	500E, 450N	CUIS 49996	154.00015	Bone, uid tooth	1	0.2
ST 65	500E, 450N	CUIS 49997	154.00016	Bone, uid, burned	1	0.6
ST 65	500E, 450N	CUIS 49998	154.00017	Mortar with brick fragments	2	83
ST 65	500E, 450N	CUIS 49999	154.00018	Brick fragments	10	12.3
ST 65	500E, 450N	CUIS 50000	154.00019	Mortar	2	48.9
ST 65	500E, 450N	CUIS 50001	154.0002	Granite	1	44.1
ST 65	500E, 450N	CUIS 50002	154.00021	Sandstone	14	34.5
ST 65	500E, 450N	CUIS 50003	154.00022	Slate, gray	1	0.5
ST 65	500E, 450N	CUIS 50004	154.00023	Charcoal	3	0.5
ST 65	500E, 450N	CUIS 50005	154.00024	Coal	6	65
ST 66	500E, 460N	CUIS 50006	155.00001	Plain, grog-tempered pottery	1	5.1
ST 66	500E, 460N	CUIS 50007	155.00002	Cord-marked, sand-tempered pottery	4	8
ST 66	500E, 460N	CUIS 50008	155.00003	Uid stamped, sand-tempered pottery	1	7.4
ST 66	500E, 460N	CUIS 50009	155.00004	Redware, glazed	1	4.7
ST 66	500E, 460N	CUIS 50010	155.00005	Brick fragments	9	13
ST 66	500E, 460N	CUIS 50011	155.00006	Metal, uid fragments	2	0.8
ST 67	500E, 470N	CUIS 50012	156.00001	Plain, sand-tempered pottery	1	7.2
ST 67	500E, 470N	CUIS 50013	156.00002	Brick fragments	12	18.8
ST 67	500E, 470N	CUIS 50014	156.00003	Nail, uid fragment	1	3.8
ST 67	500E, 470N	CUIS 50015	156.00004	Slate, gray	1	1.8
ST 67	500E, 470N	CUIS 50016	156.00005	Coal	1	13.1
ST 68	500E, 490N	CUIS 50017	157.00001	Plain, sand-tempered pottery	1	0.9
ST 68	500E, 490N	CUIS 50018	157.00002	Brick fragment	1	0.5
ST 68	500E, 490N	CUIS 50019	157.00003	Glass, colorless	1	0.4
ST 69	500E, 500N	CUIS 50020	158.00001	Pearlware, blue, transfer-print	1	1.5
ST 69	500E, 500N	CUIS 50021	158.00002	Plain, sand-tempered pottery	2	4.9
ST 69	500E, 500N	CUIS 50022	158.00003	Brick fragments	6	6.1
ST 69	500E, 500N	CUIS 50023	158.00004	Plain, grog-tempered pottery	1	6.2
ST 69	500E, 500N	CUIS 50024	158.00005	Sand-tempered sherd with possible mending	1	9.7
ST 69	500E, 500N	CUIS 50025	158.00006	Nail, uid fragments	3	9
ST 69	500E, 500N	CUIS 50026	158.00007	Bone, uid, fragment, burned	1	0.3
ST 69	500E, 500N	CUIS 50027	158.00008	Coal	6	12.1
ST 70	500E, 540N	CUIS 50028	159.00001	Cord-marked, sand-tempered pottery	2	3.6
ST 70	500E, 540N	CUIS 50029	159.00002	Metal, uid fragment	1	1.1
ST 70	500E, 540N	CUIS 50030	159.00003	Plain, grog-tempered pottery	3	26.4
ST 70	500E, 540N	CUIS 50031	159.00004	Uid-stamped, grog-tempered pottery	1	5.5
ST 71	500E, 570N	CUIS 50032	160.00001	Nail, wire	1	2.6
ST 71	500E, 570N	CUIS 50033	160.00002	Bottle cap fragment	1	1.5
ST 74	504E, 430N	CUIS 50034	161.00001	Brick fragments	3	5.6
ST 75	510E, 550N	CUIS 50035	162.00001	Uid stamped, sand-tempered pottery	2	4.5
ST 75	510E, 550N	CUIS 50036	162.00002	Metal, uid fragment	1	1.3
ST 76	510E, 570N	CUIS 50037	163.00001	Check-stamped, stand-tempered pottery	1	0.5
ST 76	510E, 570N	CUIS 50038	163.00002	Plain, sand-tempered	1	0.9

EU #	Provenience	Catalog #	Lot #	Description	Ct.	Wt. (g)
ST 77	510E, 580N	CUIS 50039	164.00001	Plain, grog-tempered pottery	1	9.8
ST 77	510E, 580N	CUIS 50040	164.00002	Plain, sand-tempered pottery	2	8.7
ST 78	510E, 590N	CUIS 50041	165.00001	St. Johns check-stamped, stand-temper	1	4
ST 78	510E, 590N	CUIS 50042	165.00002	St. Johns plain	2	3.3

References

- Alley, R. B, D.A. Meese, C.A. Shuman, A.J. Gow, K.C. Taylor, P.M. Grootes, J.W.C. White, M. Ram, E.D. Waddington, P.A. Mayewski, and G.A. Zielinski
1993 Abrupt Increase in Greenland Snow Accumulation at the End of the Younger Dryas Event. *Nature* 362:527–529.
- Adovasio, James M., and D.R. Pedler
1997 Monte Verde and the Antiquity of Humankind in the Americas. *Antiquity* 71:573–580.
- Ascher, Robert, and Charles Fairbanks
1971 Excavation of a Slave Cabin. *Historical Archaeology* 5:3–17.
- Anderson, David G.
1985 Middle Woodland Societies on the Lower South Atlantic Slope: A View from Georgia and South Carolina. *Early Georgia* 13(1&2):29–66
1996 Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 29–57. University of Alabama Press, Tuscaloosa.
2001 Earliest Americans Theme Study—Draft: Southeast Project Area Historic Context. http://www.cr.nps.gov/seac/outline/02-paleoindian/se_paleo/01-intro.htm.
n.d. Southeast Context. In *The Earliest Americans Theme Study for the Eastern United States*, pp. 44–82, Washington, D.C., in press.
- Ashley, Keith
1992 Swift Creek Manifestations Along the Lower St. Johns River. *The Florida Anthropologist* 45(2):127–138.
- Bonnichsen, Robson
1999 *Who Were the First Americans*. A Peopling of the Americas Publication, Corvallis.
- Bullard, Mary R.
1983 *Black Liberation on Cumberland Island in 1815*. South Dartmouth, Mass.: M.R. Bullard.
1993 Uneasy Legacy: The Lynch-Greene Partition on Cumberland Island, 1798–1802. *The Georgia Historical Quarterly* 77(4):757–788.
2001 *Title Search of Great and Little Cumberland Islands, Camden County, Georgia*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.
2003 *Cumberland Island. A History*. University of Georgia Press, Athens and London.
- Cadle, Farris W.
1991 *Georgia Land Surveying History and Law*. The University of Georgia Press, Athens and London.
- Ceci, Lynn
1984 Shell Midden Deposits as Coastal Resources. *World Archaeology* 16(1):62–74.

Chatelain, Verne E.

- 1941 *The Defenses of Spanish Florida 1565 to 1763*. Carnegie Institution of Washington Publication 511, Washington, D.C.

Claassen, Cheryl

- 1998 *Shells*. Cambridge University Press, Cambridge.

Coleman, Kenneth

- 1976 *Colonial Georgia. A History*. Charles Scribner's Sons, New York.

Cook, Fred C.

- 1977 The Lower Georgia Coast as a Cultural Sub-Region. *Early Georgia* 5(1 &2):15–99.

Cook, Fred C. and Charles E. Pearson

- 1989 The Southeastern Ceremonial Complex on the Georgia Coast. In *The Southeastern Ceremonial Complex: Artifacts and Analysis*, edited by Patricia Galloway, pp. 145–165. University of Nebraska Press, Lincoln and London.

Crites, Gary D.

- 1991 Investigations into Early Plant Domestication and Food Production in Middle Tennessee: A Status Report. *Tennessee Anthropologist* 16:69–87.

Crook, Morgan R. Jr.

- 1986 *Mississippi Period Archaeology of the Georgia Coastal Zone*. University of Georgia Laboratory of Archaeology Series Report No. 23, Georgia Archaeological Research Design Papers No. 1. The University of Georgia, Athens.

Crusoe, Donald L.

- 1973a *Cumberland Island Archeological Investigations: Stafford Airfield Site 9 Cam 10*. Memorandum on file at the National Park Service, Southeast Archeological Center, Tallahassee.
1973b *Cumberland Island National Seashore. A Research Prospectus*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.

DePratter, Chester B.

- 1976 The Refuge Phase on the Coastal Plain of Georgia. *Early Georgia* 4(1 & 2):1–13.
1979 Ceramics. In *The Anthropology of St. Catherines Island. The Refuge-Deptford Mortuary Complex*, edited by D.H. Thomas and C.S. Larsen. Anthropological Papers of the American Museum of Natural History 56(1):109–132

DesJean, Thomas, Irvy R. Quitmeyer, and Karen Jo Walker

- 1985 A Coastal Swift Creek Community at King's Bay, Georgia. In *Indians, Colonists, and Slaves: Essays in Memory of Charles H. Fairbanks*, edited by Kenneth W. Johnson, Jonathan M. Leader, and Robert C. Wilson, pp. 155–177. Florida Journal of Anthropology Special Publication No.4.

Dixon, E. James

- 1999 *Bones, Boats, and Bison: Archeology and the First Colonization of Western North America*. University of New Mexico Press, Albuquerque.

Ehrenhard, John E.

- 1976 *Cumberland Island National Seashore. Assessment of Archaeological and Historic Resources*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.
- 1981 *Archeological Mitigation of NPS CAM 5 and 9 CAM 6 Analysis of Prehistoric and Historic Ceramics and Bottles*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.

Ehrenhard, John E. and Mary R. Bullard

- 1981 *Stafford Plantation Cumberland Island National Seashore, Georgia Archeological Investigations of a Slave Cabin*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.

Ferguson, Leland

- 1992 *Uncommon Ground. Archaeology and Early African America, 1650–1800*. Smithsonian Institution Press, Washington and London.

Gallay, Alan

- 1988 Jonathan Bryan's Plantation Empire: Land, Politics, and the Formation of a Ruling Class in Colonial Georgia. *The William and Mary Quarterly*, Third Series, 45 (2):253–279.

Griffin, James B.

- 1967 Eastern North American Archaeology: A Summary. *Science* 156: 175–191.

Hails, J.R., and J.H. Hoyt

- 1969 An Appraisal of the Evolution of the Lower Atlantic Coastal Plain of Georgia, U.S.A. *Transactions of the Institute of British Geographers* Vol 0, Issue 46:53–68.

Hemmings, E. Thomas and Kathleen Deagan

- 1973 *Excavations on Amelia Island in Northeast Florida*. Contributions of the Florida State Museum, Anthropology and History 18, Gainesville.

Hillestad, Hilburn O., John R. Bozeman, A. Sydney Johnson, C. Wayne Berisford, and James I. Richardson

- 1975 *The Ecology of Cumberland Island National Seashore, Camden County, Georgia*. Georgia Marine Science Center, University System of Georgia, Skidaway Island, Georgia.

Hoffman, Paul E.

- 1992 Lucas Vázquez de Ayllón. In Columbus and the Land of Ayllón. *The Exploration and Settlement of the Southeast*, edited by Jeannine Cook. The Darian News, Darian, Georgia.

Horvath, Elizabeth

- 1995 *CUIS Dungeness Septic System-SEAC Acc. 1187–6/13–14/95*. Memorandum on file at the National Park Service, Southeast Archeological Center, Tallahassee.

Jennings, Jesse D.

- 1974 *Prehistory of North America*. McGraw-Hill, New York.

Kaplan, Eugene H.

- 1988 *Southeastern and Caribbean Seashores*. Peterson Field Guide Series. Houghton Mifflin Company, Boston and New York.

Kent, Bretton W.

- 1988 *Making Dead Oysters Talk. Techniques for Analyzing Oysters from Archaeological Sites*. Maryland Historical Trust, St. Marys City.

Mitchie, James L.

- 1996 The Taylor Site: An Early Occupation in Central South Carolina. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 238–269. University of Alabama Press, Tuscaloosa.

Meltzer, David J., Donald K. Grayson, Gerardo Ardila, Alex W. Barker, Dena F. Dincauze, C. Vance Haynes, Francisco Mena, Lautaro Núñez, and Dennis J. Stanford.

- 1997 On the Pleistocene Antiquity of Monte Verde, Southern Chile. *American Antiquity* 62:659–663.

Milanich, Jerald T.

- 1971a The Deptford Phase: An Archeological Reconstruction. Ph.D. Dissertation, University of Florida.
1971b Surface information from the presumed site of San Pedro de Mocamo. *Conference on Historic Site Archaeology Papers* 5:114–121.
1994 *The Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.

Moore, Clarence B.

- 1897 Certain Mounds of the Georgia Coast. *Journal of The Academy of Natural Sciences of Philadelphia*, vol XI.

Muller, Jon

- 1983 The Southeast. In *Ancient North Americans*, edited by Jesse D. Jennings, pp. 373–419. W. H. Freeman and Co., New York.

Nickel, Robert K.

- 2003 *A Ground-Penetrating Radar Survey at the Dungeness Complex Cumberland Island National Seashore Georgia*. Ms. on file at the National Park Service, Southeast Archeological Center, Tallahassee.

Nightingale, B.N.

- 1938 Dungeness. *Georgia Historical Quarterly*. Vol 22, pp.369–383.

Noël Hume, Ivor

- 1969 *A Guide to Artifacts of Colonial America*. Vintage Books, New York.

Otto, John Solomon

- 1984 *Cannon's Point Plantation, 1794–1860. Living Conditions and Status Patterns in the Old South*. Academic Press, New York.

- Peebles, Christopher, and Susan Kus
1977 Some Archaeological Correlates of Ranked Societies. *American Antiquity* 42(3):421–48.
- Prentice, Guy
2002 *Standard Field Procedures Manual for the Southeast Archeological Center's Regionwide Archeological Survey Program*. National Park Service, Southeast Archeological Center, Tallahassee.
- Rigdon, Thomas A. and Alfred J. Green
1980 *Soil Survey of Camden and Glynn Counties, Georgia*. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Russo, Michael
1992 Chronologies and Cultures of the St. Marys Region of Northeast Florida and Southeast Georgia. *The Florida Anthropologist* 45(2):107–126.
- Sassaman, Kenneth E.
1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology*. University of Alabama Press, Tuscaloosa.
1996 Early Archaic Settlement in the South Carolina Coastal Plain. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 58–83. University of Alabama Press, Tuscaloosa.
- Sassaman, Kenneth E., and David G. Anderson
1995 *Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management*. Savannah River Archaeological Research Papers 6, Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Schoettle, Taylor
1993 *A Guide to a Georgia Barrier Island*. Darien Printing and Graphics, Darien, Ga.
- Sherwood, Sarah C., Boyce N. Driskell, Asa R. Randall, and Scott C. Meeks
2004 Chronology and Stratigraphy at Dust Cave, Alabama. *American Antiquity* 69(3):533–554.
- Singleton, Theresa A.
1980 *The Archaeology of Afro-American Slavery in Coastal Georgia: A Regional Perception of Slave Household and Community Patterns*. Ph.d. dissertation, Department of Anthropology, University of Florida.
- Smith, Bruce D. (editor)
1978 *Mississippian Settlement Patterns*. Academic Press, New York.
- Smith, Bruce
1986 The Archaeology of the Southeastern United States: From Dalton to deSoto, 10,500–500 B.P. In *Advances in World Archaeology*, Vol. 5, edited by Fred Wendorf and A. Close, pp. 1–92. Academic Press, Inc.
1989 Origins of Agriculture in Eastern North America. *Science* 246:1566–1571.

- Stuiver, Minze, Paula J. Reimer, E. Bard, J.W. Beck, G.S. Burr, K.A. Hughen, B. Kromer, G. McCormac, J. van der Plicht and M. Spurk
1998 INTCAL98 Radiocarbon Age Calibration, 24000-0 cal BP *Radiocarbon* 40(3) 1041–1083.
- Sullivan, Buddy
1998 Tabby. A Historical Perspective of an Antebellum Building Material in McIntosh County, Georgia. In *The Conservation and Preservation of tabby. A Symposium on Historic Building Material in the Coastal Southeast*. Historic Preservation Division, Georgia Department of Natural Resources.
- Thomas, David H. and Clark S. Larsen
1979 *The Anthropology of St. Catherines Island. The Refuge-Deptford Mortuary Complex*, edited by D.H. Thomas and C.S. Larsen. Anthropological Papers of the American Museum of Natural History 56(1):109–132
- Torres, Louis
1977 *Historic Research Study Cumberland Island National Seashore, Georgia, and Historic Structure Report/Historical Data Section of the Dungeness Area*. United States Department of Interior, National Park Service, Denver, Colorado.
- Ward, Jeanne A., William Hampton Adams, and Carolyn Rock
1986 Prehistory and History of the Kings Bay Locality. In *Archaeological Testing of Aboriginal and Historical Sites, Kings Bay, Georgia*, edited by William Hampton Adams, pp. 9–16. University of Florida, Department of Anthropology Reports of Investigations 4. Gainesville.
- Wayne, Lucy B.
1987 Swift Creek Occupation in the Altamaha Delta. *Early Georgia* 15(1&2):46–65
- Worth, John E.
1995 *The Struggle for the Georgia Coast: An 18th-Century Spanish Retrospective on Guale and Mocama*. Anthropological Papers of the American Museum of Natural History No. 75, University of Georgia Press, Athens.
- Wright, J. Leitch, Jr.
1971 *Anglo-Spanish Rivalry in North America*. University of Georgia Press, Athens.
- Zeichner, Lauren Lubin
1987 *The Historic Landscape of Dungeness, Cumberland Island National Seashore, Georgia*. CPSU Report No.35, U.S. National Park Service, Cooperative park Studies Unit, Institute of Ecology, University of Georgia, Athens.

